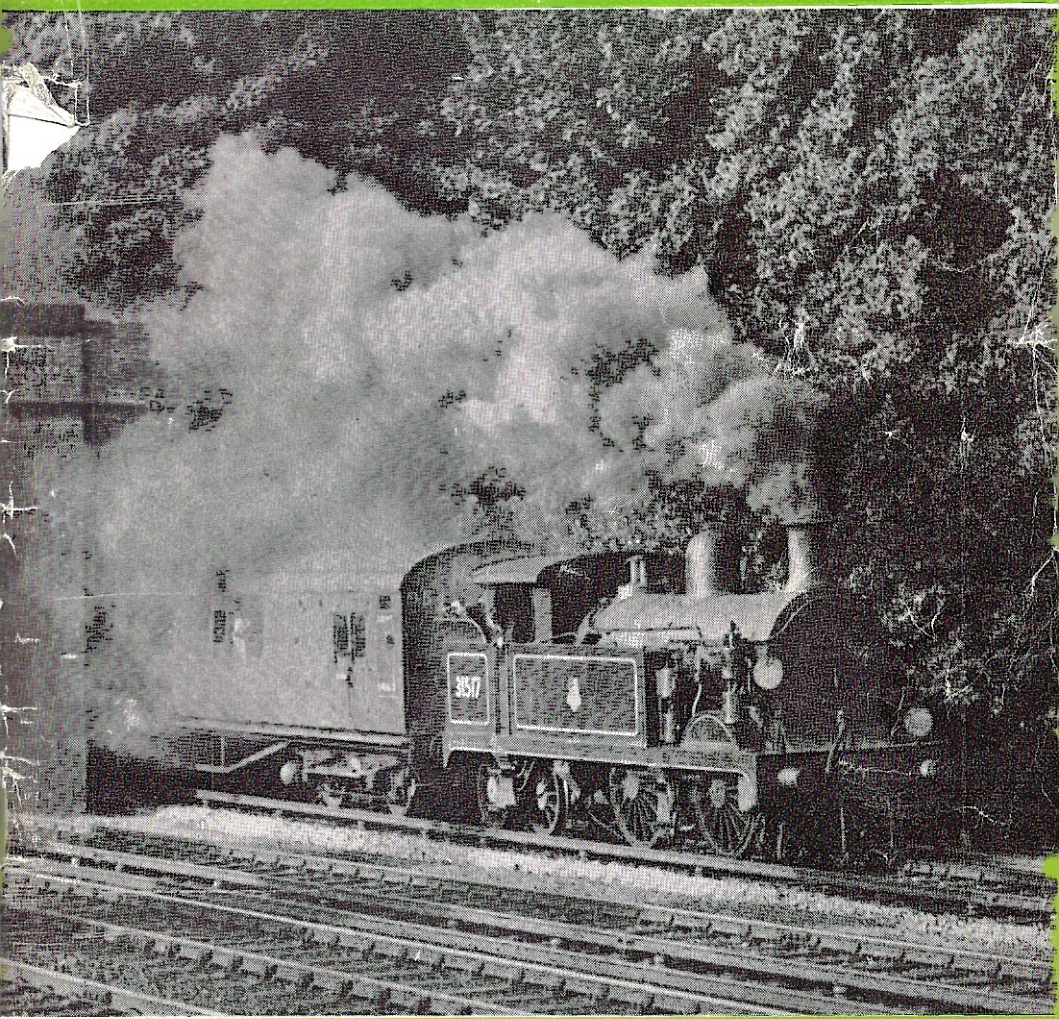
Trains ILLUSTRATED

Vol. IX JUNE, 1956 No. 6



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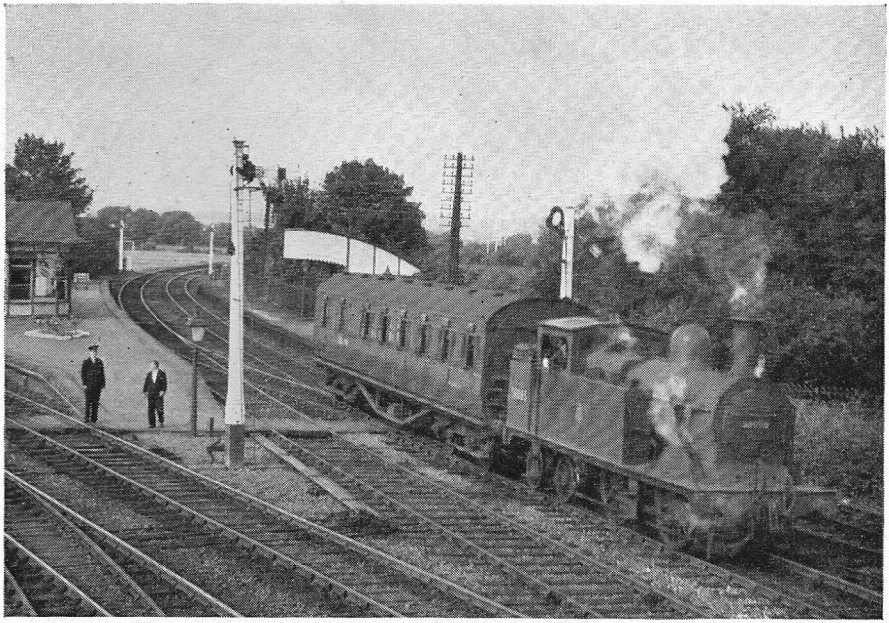


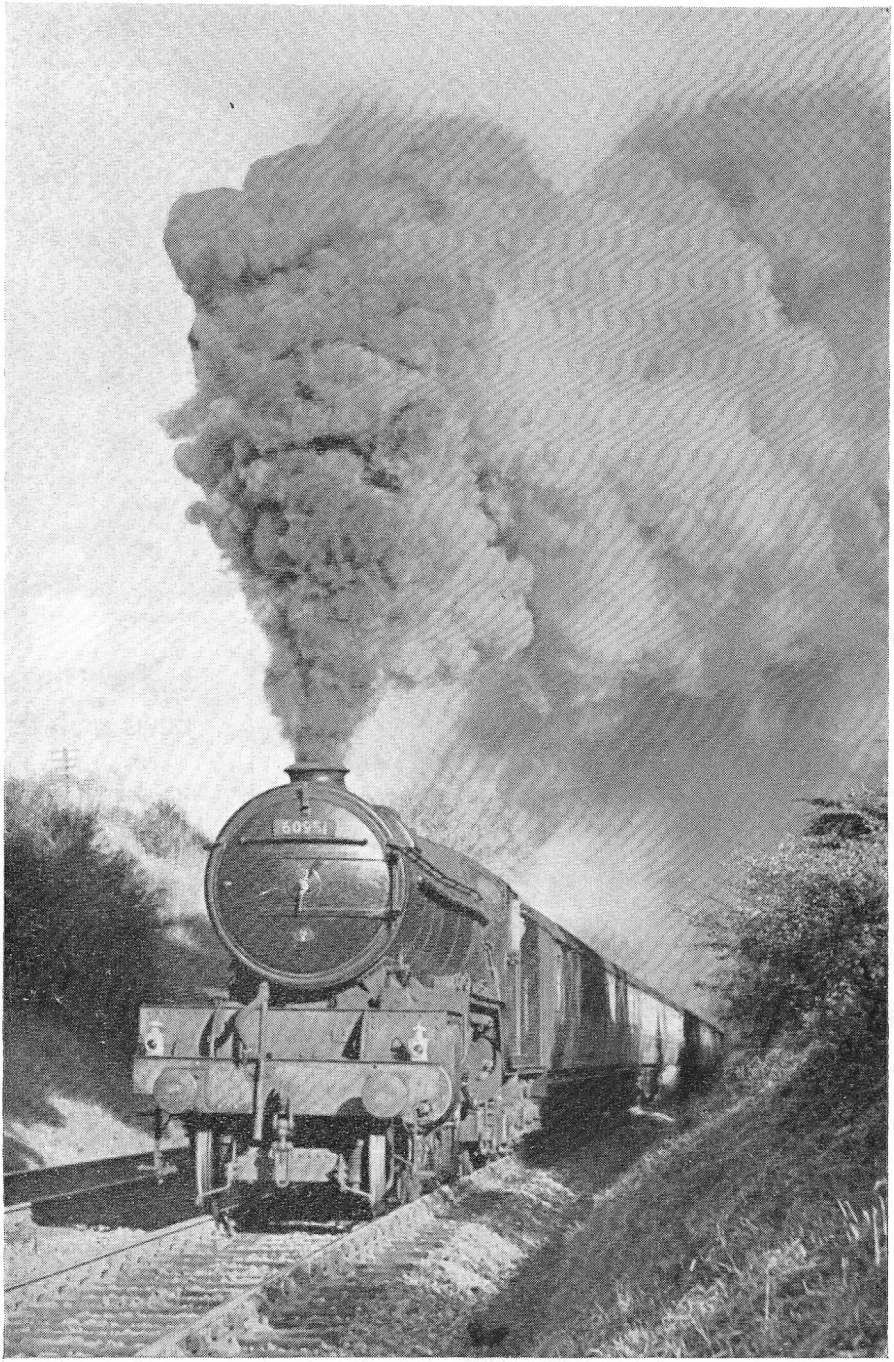
A Johnson 0-4-4T of the Midland, now No. 58085, shunts the Southwell push-and-pull train at Rolleston Junction, west of Newark, on September 3, 1955. [*J. Cupit*

the editor's news & views

TALKING OF TRAINS

The next two years

MAJOR modernisation schemes on which British Railways hope to start work in 1956-7 were recently made known. In addition to the quadrupling of the East Coast main line between New Barnet and Potters Bar, where activity is already in evidence, it is hoped to begin adding two further tracks to some of the other double-track bottlenecks on this route. The resignalling of Manchester (Victoria) with colour lights operated from centralised cabins and improvement of the track layout there, are large-scale works that will be begun this year, and they will be followed by an extensive renovation of the station accommodation. Construction of the flyover south of Bletchley station, to carry the Oxford-Cambridge line clear of the West Coast main line, will be put in hand, and also new branches to collieries at Bevercotes and Cotgrave, Notts, and at Glenochil (Clackmannan) and Killoch (Ayrshire), in the Scottish Region. On the motive power side, it is expected that the first of the pilot scheme diesels to appear will be the three 2,000 h.p. diesel-hydraulic locomotives to be erected at Swindon, which are likely to take the road late this year ; delivery of the remaining 171 main line machines will continue through 1957, and over 400 more diesel shunters will go into action during 1956-7. New diesel depots are to be set up at Hull (Botanic Gardens), Norwich, Lincoln, Leith, Birmingham, Hastings, Cambridge, Stratford, Darlington, Bristol, Cardiff and Westbury. Stations at which reconstruction or major improvements will be undertaken include Barrow (Central), Cannon Street (London), Banbury, Glasgow (Central), Chichester, Weymouth, Forest Hill and Plymouth (North Road), while a new station is to be built to serve Harlow (New Town). The new deep-level interchange subways and the promised escalators at the Bank station, on the Waterloo & City underground railway, are to be put in hand. New carriage sheds are to be provided at Derby and Newcastle and the shed at Redbank, Manchester, is to be modernised, while carriage cleaning and storage facilities at Stratford, Liverpool and Wolverhampton, amongst other places, will be improved.



★ Vigorous effort by Class " V2 " 2-6-2 No. 60951, tackling the last section of the gruelling five miles or so of 1 in 75 to Glenfarg summit with the afternoon Perth-Edinburgh express. [*W. J. V. Anderson*

This summer British Railways are boldly extending their cheap mid-week fare scheme. Whereas last year these cut-price tickets were restricted to journeys between large inland centres and the holiday areas, from May 1 *to October* 25 *this year return fares approximately* 20 *per cent below the ordinary third class rate will be available on Tuesdays, Wednesdays and Thursdays between any pair of stations* 100 *miles or more apart, subject to a minimum fare of* 25*s. and return travel on the Tuesday, Wednesday or Thursday of the following week or the week after. The scheme also covers rail and sea routes to Ireland (until September* 13 *only).*

●

New coaching stock plans

IN 1956-7 British Railways plan to increase their stock of diesel multiple units by 1,750 units, at a cost of £23 millions. Of this total 498 vehicles are scheduled for construction in 1956, 219 by outside contractors, 191 at Derby works, 64 at Swindon and 24 at Eastleigh. The last-mentioned two dozen cars are announced as diesel-electric, and these are presumably for the London-Hastings service, which is down for dieselisation during the period ; we gather that these units may be arranged so that they can operate as straight electric trains, picking up from the third rail, in the electrified areas of the Southern Region. We understand also that diesel-electric multiple units will be provided for the Hampshire local services which are to be dieselised. Other main routes on which the introduction of diesel trains is promised during 1956-7 are Edinburgh-Glasgow and Birmingham-Swansea. Some of the new multiple-units, incidentally, are to be constructed in light alloy. In addition, Eastleigh works is to turn out 391 multiple-unit electric vehicles this year, including the first of the promised main line sets with improved bogies ; it will also produce three all-steel restaurant cars of a new design, the first of which is nearly ready. The future programme for Eastleigh includes new electric stock for the Euston-Watford service of the L.M.R. and the modernisation with new lavatory-equipped bodies of the Southern's "2-NOL" electric units.

●

British Railways have officially announced that Brighton locomotive works is to be closed down at the end of 1958, *on the grounds that with the change of motive power policy no new locomotive construction can be allocated to it beyond its* 1956 *programme. The news has naturally caused consternation among the staff of the* 104*-year-old works, who are reported to be planning a fight against the decision.*

Quick N.E.R. dieselisation

WITH the exception of its electrified routes and main line expresses, the N.E.R. expects to have dieselised all its passenger services by 1958, and to introduce diesel power on freight trains within five to seven years. Next autumn multiple-unit diesels will take up duty between Newcastle and Carlisle, Darlington and Saltburn, Bishop Auckland and Richmond and in the Hull area, and in the following summer they will appear on Newcastle–Sunderland–Bishop Auckland and Newcastle-Alnwick services ; there is an early prospect, too, of Ilkley, Keighley and Skipton coming within the range of the West Riding diesel trains. The new centralised electro-pneumatic signalbox at Newcastle will come into full operation in 1958 and a start is being made this year on the replacement of the two mechanical boxes at Huddersfield with an all-electric cabin. Construction of the new locomotive depot at Thornaby to replace those at Middlesbrough and Newport is well advanced, and modernisation of existing depots at York North, Hull Dairycoates, Gateshead and Neville Hill, Leeds, is scheduled. Station improvement schemes are an important feature of the N.E.R. plans. Modern electric lighting is to be installed at York and Newcastle, and more of the attractive waiting rooms pioneered at Newcastle, York, Darlington and Bradford (Forster Square) are to be furnished at large stations. A new colour scheme of oriental blue and white, relieved appropriately by the Regional colour of tangerine, has been devised, and the reconstructed station at Middlesbrough is one of the first to which it is being applied.

●

Victoria may become virtually a sub-terranean terminal. Planning permission has been sought from London County Council for a scheme that would raise blocks of offices from 12 *to* 29 *storeys high above the platforms of the London station.*

●

Freight developments

PRIDE of place among the freight traffic improvement schemes on which work will be in progress during 1956-7 probably goes to the extensive reorganisation at Perth. Here one new marshalling yard is being established to take the place of four, and a central power-worked cabin controlling colour light signals will replace no fewer than 17 existing signalboxes. Work is well in hand on new yards at Temple Mills, London, and Millerhill, Edinburgh, and will be started this year on the new yards at Ripple Lane, Barking, and Margam, in South Wales. An essential

preliminary to the reconstruction of the whole layout at Peterborough is a new goods depot, which will be begun this year, as will the new goods yard at Crawley serving the new town. Goods depots are to be modernised at Lincoln, Liverpool (Spekeland), and Manchester, and other freight traffic improvement schemes are planned at Chelmsford, Sheffield (Queens Road), Welwyn Garden City, Liverpool (Huskisson), Birmingham (Curzon Street and Aston) and Stoke. Additional facilities for iron ore traffic are to be set up at Glasgow and Motherwell. New wagon repair depots will be built between Thornton and Alloa, the depots at Simonside (Co. Durham), Newport (Mon.) and Neath are to be modernised, and a completely new wagon shop is to be provided at Port Talbot. Expenditure on the equipment of existing freight stock with continuous vacuum brakes will begin in 1957 and rise considerably in 1958.

●

This summer the local passenger services between North Walsham and Mundesley, Saxmundham and Aldeburgh, and Swaffham and Thetford will be entirely operated by diesel multiple-units.

BRITISH RAILWAYS LOCOMOTIVE BUILDING PROGRAMME—1956

Type	Loco. Nos.	Builders
DIESEL		
2,000 h.p. diesel-hydraulic	*Not allocated*	Swindon
350 h.p. diesel elec. 0-6-0	13207-13216	Derby
	13125-13126	
	13245-13297	
,, ,, ,,	13232-13244	Darlington
	13298-13331	
diesel mech. 0-6-0	11187-11191	Swindon
200 h.p. ,, ,,	11116-11120	Hudswell
	11144-11147	Clarke
,, ,, ,,	11149-11160	Drewry
	11212-11219	Car Co.
,, ,, ,,	11138-11143	Hunslet
	11161-11172	Eng. Co.
,, ,, ,,	11177-11186	Andrew Barclay
165 h.p. ,, 0-4-0	11507-11508	Ruston & Hornsby
150 h.p. ,, ,,	11503-11506	Andrew Barclay
200 h.p. diesel-hydraulic 0-4-0	11707-11719	N. British Loco. Co.
STEAM		
Cl "9" 2-10-0... ...	92070-92086	Crewe
	92097-92119	
,, ,, ...	92087-92096	Swindon
	92178-92187	
Cl "5" 4-6-0	73124	Doncaster
	73155-73169	
,, ,, ...	73125-73144*	Derby
Cl "4" ,, ...	75078-75079	Swindon
	75050-75064	
,, 2-6-0	76075-76084	Horwich
,, ,, ...	76050-76064	Doncaster
Cl "2" ,, ...	78055-78064	Darlington
Cl "4" 2-6-4T ...	80131-80150	Brighton
"94XX" 0-6-0T ...	9491-9499	Hunslet Eng. Co.

**These locomotives will be fitted with British Caprotti valve gear.*

●

"As you were" on the S.R.

FIRST to appear of the summer timetables, as usual, are those of the Southern Region, though this is, perhaps, hardly surprising in view of the fact that for the fourth successive summer there are very few changes worth mentioning, any acceleration once again being conspicuous by its absence, we hear from Mr. Cecil J. Allen. From June 11, when the new timetables come into operation, there will be a useful new evening express at 9.30 p.m. from Waterloo to Basingstoke, Winchester, Southampton, Brockenhurst and Bournemouth Central, arriving at 12.5 midnight, and a new up morning train at 7.7 a.m. from Bournemouth West and 7.16 a.m. from Bournemouth Central, calling at the same stations (Basingstoke excepted) and due in Waterloo at 9.33 a.m. ; these will be restaurant car trains. The 5.45 p.m. from London Bridge to Hastings and Littlehampton will be run as two separate 12-car trains, the first portion, at 5.43 p.m., calling at Burgess Hill, Hassocks, Hove, Worthing and stations to Littlehampton, and the second part, at 5.45 p.m. for Haywards Heath, Lewes, Eastbourne, Bexhill and Hastings. In the up direction the 6.49 a.m. from Eastbourne and the 6.50 a.m. from West Worthing will also be separate 12-car trains to London Bridge, instead of six-car sets combining at Haywards Heath. All times between Lewes and Eastbourne will be increased by 2 min., the down hourly "45s" from Victoria being allowed 86 instead of 84 min. to Eastbourne, and the up hourly expresses leaving Hastings and Eastbourne 1 min. earlier, at 4 and 35 min. instead of 5 and 36 min. past the hr. respectively. There will be an additional semi-fast from Hastings at 8.33 a.m. and from Eastbourne at 9.8 a.m., due in Victoria at 10.53 a.m. On the Eastern Section rumours that at long last there was to be some improvement of Kent Coast services have proved to be baseless, and no alteration whatever is to be discovered in the main line train services, other than that the "Man of Kent" appears to have grown into a family. Precisely how the 1.15 and 4.15 p.m. from Charing Cross to Folkestone, Dover, Deal, Ramsgate and Margate, and the 9.40 a.m. and 12.40 p.m. from Margate by the same route to Charing Cross can all be the "Man of Kent" is not explained, but they are all so described in the timetable. Why could not some other name have been used for the second pair—"Maid of Kent," for example, or "Invicta," with its historic associations ?

Considerable improvement in services on the Uckfield and Heathfield lines results from the introduction of a regular interval service, hourly on weekdays and two-hourly on Sundays. As a general principle, these trains will run between Tonbridge and Brighton and Tunbridge Wells West and Eastbourne, giving connections at Lewes and Polegate with London Trains and also with trains serving Eastbourne, Hastings and Brighton.

●

More Western 60 m.p.h. runs

ALTHOUGH the Western Region summer timetables show but few major changes, writes Mr. Cecil J. Allen, it is pleasant to note that mile-a-minute schedules at last are realised to be a good advertising point, and that several of the runs which previously attained all but to that standard now will have the necessary odd minutes pared off to bring them above the 60 m.p.h. line. For example, the 6.30 and 7.15 p.m. Bristol expresses from Paddington will run the 94.0 miles to Chippenham in 94 instead of 95 min. start to stop ; the 9.30 a.m. down to the West of England will be allowed 106 instead of 107 min. to cover the 106.7 miles from Reading to Taunton ; and the 9.5 a.m. from Paddington will be booked over the 29.6 miles from Swindon to Bath in 29 instead of 31 min. Among new mile-a-minute runs, the summer 11.30 a.m. from Paddington to Penzance will be scheduled to cover the 89.8 miles from Newbury to Taunton in 87 min. start to stop, and a new and most useful 7.30 p.m. to Torquay on Friday evenings will be booked over the 142.7 miles to Taunton in 142 min.—the fastest start-to-stop schedule on record between London and Taunton. The last-mentioned will reach Exeter at 10.31 p.m., Torquay at 11.21 p.m. and Kingswear at 11.50 p.m. Last summer the 11.30 a.m. down, after stopping at Reading and Newbury, was passed at Taunton by the 12.0 noon "Torbay Express," but this summer the former, by considerable acceleration and omitting all stops between Taunton and Newton Abbot, will keep ahead of the "Torbay," reaching Newton at 3.5 p.m. (43 min. earlier), Plymouth at 4.20 p.m. (38 min. earlier), and Penzance at 7.10 p.m. (30 min. earlier). The through train from Swansea at 11.10 a.m. to Penzance will run in the previous path of the 11.30 a.m. from Paddington forward from Plymouth, and reach Penzance at 7.40 p.m., 16 min. earlier than now and 45 min. earlier than last summer. The latter for the first time will be refreshment car equipped between Swansea and Plymouth, the car returning from Plymouth on the 11.10 a.m. to Swansea (7.55 a.m. from Penzance). Another additional refreshment car service will be the 7.5 a.m. from Cheltenham to Paddington via Gloucester and Swindon, and the 2.15 p.m. from Paddington to Cheltenham. Reverting to the mile-a-minute schedules, the Western Region will have in its summer timetable 17 weekday runs, totalling 1,556 miles, booked daily at 60 m.p.h. or over from start to stop, and 18 runs, 1,699 miles in all, on Fridays. For the first time on record, the "Cornish Riviera Express" and the "Torbay Express" are to be restricted exclusively to passengers who have booked their seats in advance.

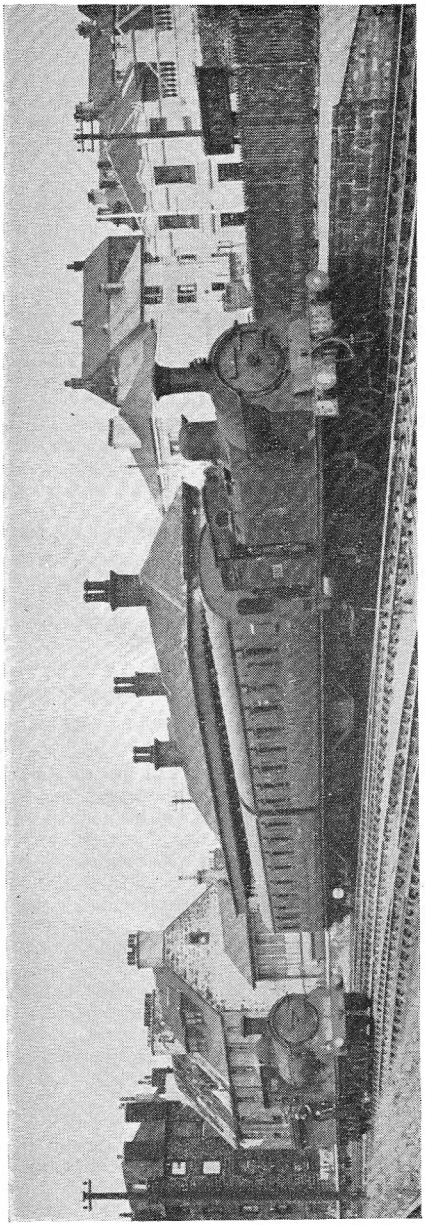
●

New cross-country services, particularly at weekends. will link seaside resorts and other large towns this summer. Among them a new train, connecting with Isle of Man sailings, will run on peak Saturdays from Liverpool to Birmingham, via Stoke, while a through train on Friday nights from Birmingham (Snow Hill) to Fishguard Harbour will give an improved service at the height of the holiday season from the Midlands to Ireland. Other new week-end services include runs between Sheffield and Portsmouth, Sheffield and Bournemouth, Sheffield and Southport, Manchester and Clacton, and Pokesdown and Birkenhead.

●

No trains, no 'buses

THE local Transport Users' Consultative Committee has agreed to a B.T.C. proposal to withdraw passenger services from the North Tyne Valley branch between Hexham and Riccarton Junction, writes Mr. D. Y. Temperley. According to our correspondent, 'bus services in the valley were abandoned some years ago, leaving a Bellingham taxi owner to build up a flourishing business unmolested by competition. Thus, even though the area is thinly populated, it seems odd that the passenger traffic offering is so meagre that the B.T.C. calculate they would save £20,000 annually if the trains were withdrawn. Defending their closure of unremunerative services, the B.T.C. recently claimed that it costs £750 annually to maintain and signal a mile of branch line track these days, apart from the running costs of the trains that use it ; as to the possibility of reduced fares, if they are cut by 25 per cent, then there must be an increase of patronage by 33⅓ per cent even to maintain the same revenue. The single line North Tyne Valley branch passes through some delightful country in Northumberland and Roxburgh, with crossing places at Reedsmouth and Deadwater, but the former is adequate for the needs of the three weekday trains each way, one of which is through to and from



★ On May 7 the axe fell on the Scottish Region's Polmont-Bo'ness passenger service. This picture, taken on July 12, 1955, shows ex-Caledonian 0-4-4T No. 55238 at Bo'ness on the 5.22 p.m. to Polmont. On the left is the goods yard pilot, "J36" 0-6-0 No. 65275.
[*W. A. Camwell*

Newcastle; Deadwater comes into use only on Saturdays, when two additional trains are put on in each direction (there is no Sunday service). Usually a Blaydon standard "4MT" 2-6-0 works the three-coach trains, but Hawick sometimes provides a "D30" 4-4-0 as a substitute, or a "D49" 4-4-0 or "V1" 2-6-2 tank may find its way on to the branch from the Hexham end; a "D11" and a "D34" 4-4-0 are among other types our correspondent has observed on the branch. Mr. Michael Gallacher writes that passenger services between Stoke-on-Trent and Leek and Stoke and Market Drayton were taken off from May 7 last, but football excursions to Stoke City and Port Vale home matches will probably be continued over these lines. We hear, too, from Mr. G. F. Bannister that the Kerry branch of the W.R. suffered its threatened complete closure on May 1.

●

The official announcement of maroon as the future standard livery for all British Railways passenger train vehicles other than multiple units has now been made. It reveals, however, that the Southern is to revert to malachite green for all its passenger stock, both locomotive-hauled and multiple unit. As we have previously disclosed, the Western Region is to run three of its named trains in the old G.W. livery of chocolate and cream this summer.

●

Why waste these Pullmans?

IT seems unbelievable to us that no one—not even the Scottish Region—has been willing to use the two Pullman observation cars on a suitable service since the death of the "Devon Belle." The neglect of the former "Coronation" beaver-tail observation cars is more understandable, for their shallow, curved rear windows offer a good view only from the seats immediately in front of them, and much of the other end of the car is now useless dead weight taken up by what was a compartment for mails in streamliner days. But the Pullman observation cars' deep windows open up a wonderful view to every seat in the vehicle; moreover, there is a bar at the other end of each car, which could surely be adapted to serve soft and solid, as well as alcoholic fare, if it was desired to increase its usefulness. We appreciate the constant need to reduce to the minimum train weight per passenger, but there is many a scenic route in this country, especially in Scotland, where the attraction of one of these cars would entice more than enough new patronage to justify their additional tonnage—witness the success of scenic cruises with the new lightweight diesel trains. The waste of these two fine cars seems strangely unimaginative.

British Railways' electrification schedule

EASTERN REGION

Opening date of the 8½ miles of catenary from Shenfield to Chelmsford is June 11 next, when 22 Liverpool Street-Shenfield workings will be extended to provide an hourly service to Chelmsford (which for the time being, however, will not lose its fast steam services). This will be followed at the end of December next by the inauguration of electric services over the 21¼ miles from Shenfield to Southend (Victoria). Both these schemes, of course, are extensions of the 1500 volts d.c. system between Liverpool Street and Shenfield, but all three will be converted to the newly adopted 25 kv. a.c. system during 1959. Conversion of the rolling stock to operate on the high frequency a.c. system will require their withdrawal from service. This problem is to be overcome by building stock for the Tilbury line electrification earlier than was originally intended. The Tilbury line is now to be electrified from the start on the 25 kv. a.c. system, and its units will therefore be able to deputise on the converted Shenfield route until the latter's stock has been adapted. As a prelude to these south-eastern conversions the Eastern Region plans to set up a 25 kv. a.c. testing ground on the lines from Colchester to Clacton and Walton, which will be electrified on the new system by the spring of 1958, and used to prove the new suburban stock. Through trains from London to Clacton and Walton will still be steam-hauled, since there are not the resources of manpower and material available to start the electrification between Chelmsford and Colchester by that time. Work will be put in hand this year on electrification of the lines from Liverpool Street to Chingford, Enfield Town, Hertford East and Bishops Stortford, completion of which is provisionally estimated for 1960. The heavy engineering works connected with the conversion of the Tilbury line, notably the extensive reconstruction at Barking, including the provision of a flyover and a new marshalling yard, means that it will be 1961 before the scheme is complete between Fenchurch Street, Tilbury, Southend and Shoeburyness.

SOUTHERN REGION

The first stage of the Southern third-rail electrification extension, from Gillingham to Ramsgate and Dover Marine via Faversham, including the Sheerness branch, is due for completion by the summer of 1959. Like the other electrified main lines of the S.R., the converted routes will be operated by multiple-units, and services will be considerably augmented. New regular interval timetables will offer the Kent Coast towns a third more trains to and from Victoria than at present, with the addition of a new service from Charing Cross ; while the Sheerness branch service is to be more than doubled. Canterbury East, too, will have new trains from Charing Cross, as well as half-a-dozen more workings to and from Victoria. As we have already reported, electrification is being accompanied by quadrupling of the Kent Coast main line between Bickley Junction and Swanley and between Rainham and Newington ; there is also to be an extension of colour-light signalling from Brixton to Ramsgate, via both the Catford Loop and Beckenham Junction, and the lengthening of certain station platforms, in addition, of course, to such works as the provision of multiple-unit car depots. The second stage of the scheme, covering the Sevenoaks-Ashford route to Dover, the Maidstone East-Ashford-Canterbury West-Ramsgate line, the Ore line and the Ramsgate-Sandwich-Deal-Dover line, is due for completion by 1962.

SCOTTISH REGION

Following negotiations with the Glasgow Corporation, the B.T.C. has authorised the electrification of 71 route miles of railways in the Clyde Valley on the 25 Kv. a.c. system. The routes to be electrified are : **North of the Clyde**—Glasgow Queen Street (Low Level) to Helensburgh and Balloch via both Clydebank Central and Drumchapel ; to Milngavie ; to Airdrie ; and to Bridgeton Central.

South of the Clyde—Glasgow Central to Kirkhill ; to Neilston High ; and the Cathcart Circle lines.

These routes comprise the first stage of the Glasgow Suburban electrification scheme. The Scottish Region are still developing their plans for the second stage and have under consideration a further 119 route miles from Glasgow Central and St. Enoch, south of the Clyde, possibly to Gourock, Wemyss Bay, Kilmacolm, Kilmarnock, East Kilbride and Motherwell. Work on the first stage is expected to start early in 1957, and it is hoped to commence operating electric train services within four years. The electrified lines north of the river will be ready ahead of those on the south, as the latter present a number of major engineering problems, such as the complete colour light signalling of Glasgow Central Station and its approach lines over the river.

RESORTS FOR RAILFANS — 18

Salisbury

by
G. FREEMAN ALLEN

LIKE Peterborough, which figured in this series of articles in September, 1955, Salisbury has a curve which brings the station forcibly to your attention. Unhappily, the Salisbury curve has gained a notoriety through its share in the responsibility for a serious accident, unlike that at Peterborough, and as a result right up to 1947 Southern regulations insisted that every train in both directions must stop in the station. In 1947 the order was relaxed for the non-stop "Devon Belle" of recent memory, and replaced by a restriction of speed through the station to 10 m.p.h.

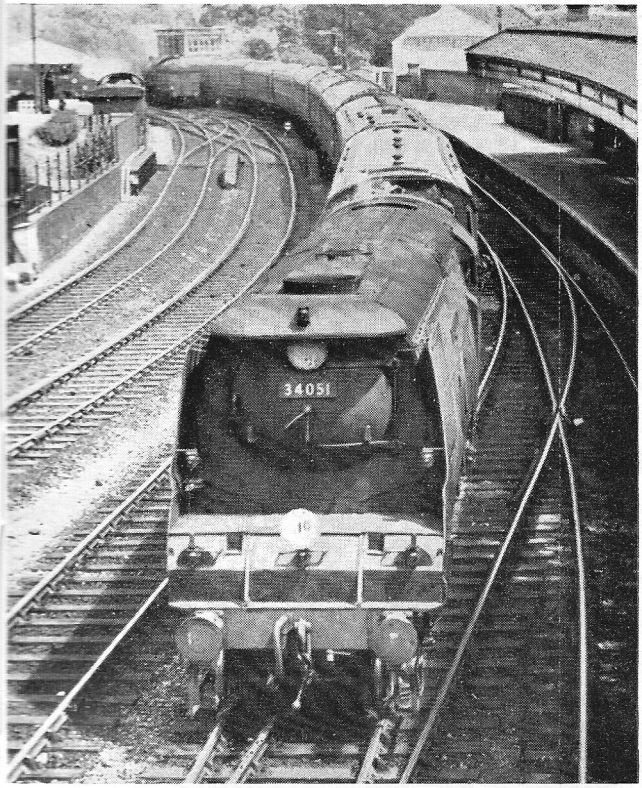
The Salisbury accident, you will recall, was the unfortunate culmination of the high speed phase of rivalry between the L.S.W.R. and the G.W.R. for the trans-atlantic traffic from Plymouth to London. Many months previously the authorities of the G.W.R., which took care of the mails from the transatlantic liners, and the L.S.W.R., which carried their passengers up to town, had become alarmed at rumours (later regarded as unfounded) of speed restrictions blithely ignored by drivers who had been primed with fat tips from wealthy Americans eager for excitement. As a result, they had strictly enjoined their crews that the schedules laid down for the boat trains were not to be cut.

During his booked stop for water at Templecombe with the L.S.W.R. train on the night of June 30, 1906, the driver of "L12" 4-4-0 No. 421 made it plain in the course of conversation with the station staff that he did not intend to cock a snook at these regulations. What followed, therefore, is still an enigma, unless it be that he mistook his whereabouts as he brought No. 421 racing down the bank into Salisbury, although it was a fine summer's night. Signalbox records showed that No. 421 averaged a good 70 miles an hour from Dinton, 8½ miles away, to the 10 chains' radius curve at the east end of Salisbury station, where the two up platform lines converge, over which 30 m.p.h. was held to be the safety limit. As she hurtled into the left-hand bend she reeled over, splintering the tail end of a milk empties passing on the down line and then veering further over to lock in terrible collision with a Beyer Peacock goods engine in the bay platform on the other side of the down through line. Within seconds No. 421's train disintegrated over the layout and half its passengers, as well as the milk train guard, the fireman of the goods engine and both enginemen—28 people in all—were dead.

Possibly there would have been no need for the curve if the Great Western had not been the first to set up premises on the city's Fisherton Street. When the L.S.W.R. first reached Salisbury, in 1847, it was with a line from Eastleigh (then known as Bishopstoke), which terminated on the south-eastern side of the city in what is now Milford goods station. The wooden goods shed here is still, virtually in its original form, serving the same function as it did 100 years and more ago, while, across the roadway which leads to it, the arrival platform of the old passenger station still receives incoming trains, although nowadays they are goods and not passenger ; near the bufferstops is a short section of platform that has not been built up from its original low level, and close by is a weigh-house and a wooden lavatory that were part of the 1847 station buildings. Milford's present transfer shed was once its locomotive depot.

A more direct route to London was opened up in 1857 by the completion of an extension of the Basingstoke-Andover line, finished three years earlier, to a junction with the line from Eastleigh to Salisbury near Milford, but with the inconvenience that the layout of the convergence required trains from London to reverse into Milford station. Presumably the L.S.W.R. regarded this as an economic temporary arrangement and was prepared to put up with the nuisance of this shunting for a short while, while it pursued the scheming to extend its empire further west which had been going on for several years previously ; in fact, it had acquired land for an approach to the Fisherton Street area as early as 1844.

The completion of the line from Andover to Salisbury and the start of work on the Salisbury & Yeovil Railway (an independent concern which a rueful South-Western, having allowed its own powers for such a line to lapse, had to buy very expensively in 1878) spurred the L.S.W.R. to get on with the job, and Bishopsdown Tunnel was bored and a line projected through from what is now Tunnel Junction to Fisherton



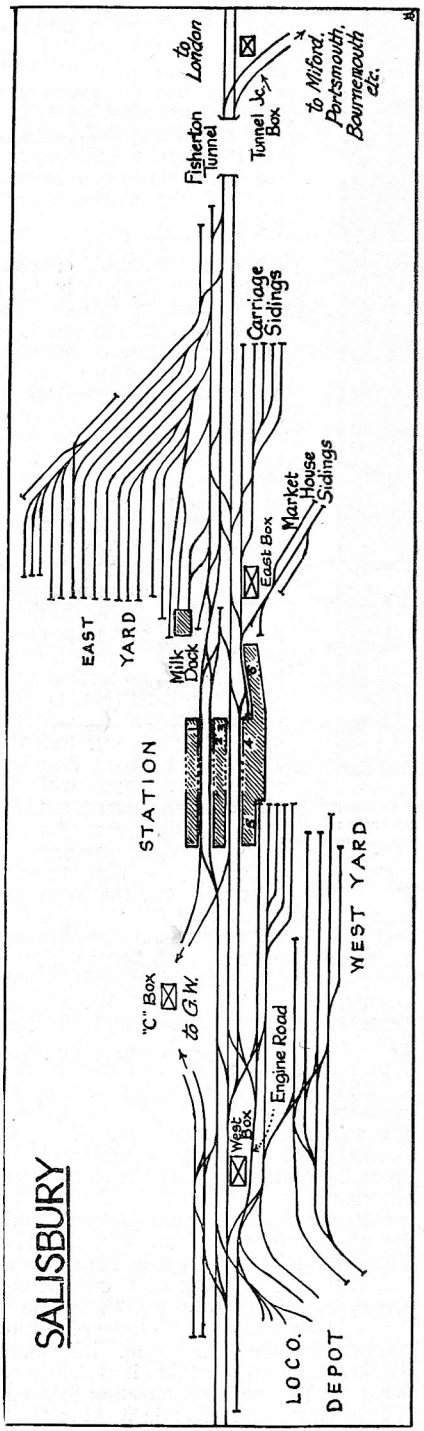
★ Salisbury's notorious curve is carefully negotiated by Pacific No. 34051 *Winston Churchill* with a Waterloo-West of England express. The East signalbox is behind the last coach of the train ; in the top left-hand corner is the milk platform on the site of the original L.S.W. up platform. [*G. F. Heiron*

Street station by 1859. The embankment of the old line to Milford from the Andover direction still stands as the third side of the Tunnel Junction triangle, but its track, after a period of use as a siding with a connection at the Milford end, has long since disappeared. From 1859 passenger traffic ceased to use Milford and the routes from London and Eastleigh (and from late 1866, Poole and Bournemouth) converged at Tunnel Junction and proceeded to Fisherton Street.

But when the L.S.W.R. eventually got to Fisherton Street, the Great Western was already in occupation, for its protégé, the Wiltshire, Somerset & Weymouth, had terminated a line from Thingley Junction, Westbury, via Warminster in the area in 1856. The L.S.W.R. was therefore forced to curve its line round the south of the G.W. terminus. In its original form the South-Western station at Fisherton Street had only two through platforms, the up one on the London side of the Fisherton Street bridge (its site is now occupied by a later platform erected for milk traffic), and the down one at the eastern end of the present No. 4 platform, with a bay let into its eastern end. The parcels office on No. 4 platform to-day is housed in the 1859 station building and the offices above it were once part of the stationmaster's house.

The present layout of the Southern station emerged from a wholesale rebuilding carried out in 1901-2. The old down platform has been extended westward and now has a bay (platform No. 5) at its western as well as its eastern end (No. 6). Two new through platforms were erected between the old down platform and the G.W. station, of which the middle is an island, so that there are now two down and two up platform lines through the station, arranged in an unusual order; for, reading from south to north, they are respectively down through (No. 4), down local (No. 3), up through (No. 2) and up local (No. 1). The Great Western station was closed to passenger traffic in 1932, and the Southern station now copes with the city's entire passenger traffic.

Two main flows of traffic intersect and connect at Salisbury — that between Waterloo and the West and that between the South Coast and Bristol and South Wales ; so far as passenger trains are concerned, each keeps with very few exceptions to a regular path through the station. The former Great Western line from Westbury has access only to the local platforms, Nos. 1 and 3, and although all four through roads are available to trains to and from Exeter, rarely do services between Waterloo and the West Country use any but Platforms 2 and 4. In the normal course of events, the only variation from these arrangements is that the daily through service between the South Coast and Plymouth adopts a suitable compromise by running into platform 4 in the down direction and platform 1 in the up, while the 1.10 p.m. stopping train from Exeter, which eventually rolls into Waterloo at 8 p.m., uses platform 1 to leave platform 2 vacant for the 12.20 p.m. Ilfracombe-Waterloo, which overtakes it at Salisbury ; what used to be the interesting 5.35 p.m. Yeovil-Gravesend milk (via Woking, Guild-



ford, Redhill, Tonbridge, Paddock Wood, Maidstone (West) and Strood) also invades platform 1 from 8.38 to 9.2 every evening, while it changes engines—I say "used to be," because this train has recently been diverted to Clapham Junction and no longer maintains a through service to Kent. Platform No. 1 has to be used as well by the few stopping trains from Southern stations from the west which terminate at Salisbury, since the western bay, No. 5, is purely a departure platform for similar services in the opposite direction. The eastern bay, No. 6, is occupied mainly by trains from and to Bournemouth which turn at Salisbury, by the 7.20 a.m. workmen's train to Idmiston Halt, on the main line, and an occasional terminating train from or train starting to Portsmouth; most of the last-mentioned use the through platforms, however.

Even at week-ends it is only a few summer Waterloo-West of England services, or *vice versa*, which have to encroach on platforms 3 or 1. The station can take trains on the main line at a headway of 9 minutes, which seems to me very reasonable, since every train must be granted 6 minutes in the station (with the exception of the "Atlantic Coast Express," whose allowance is only 5 minutes) to take water, in view of the Southern's distaste for water-troughs. This lack of troughs, of course, made the injunction to stop at Salisbury superfluous; moreover, the halt there is also the opportunity for such jobs as bringing the coal forward on the tender and train examination. So far as I can see, that 9-minute headway is not put to the test of regular schedule; for example, the summer Saturday 1.25 a.m. from Waterloo is booked into platform 3 at 3.10 a.m., even though the 1.15 a.m. is due out of platform 4 at 3.5.

★ A Cardiff-Portsmouth express changes engines at Salisbury. W.R. "Castle" No. 7011 *Banbury Castle* sets off through Platform 3, for the shed, while Class "4" 2-6-0 No. 76028 takes over the train in Platform 1. [*R. J. Farthing*

Passenger train arrivals and departures are spread fairly evenly over the hours of a normal weekday from about 8 a.m. to 10 p.m., the station's busiest period being from 10 a.m. to 2 p.m. on a peak summer Saturday, when its timetable shows 28 down and 26 up trains terminating, originating or halting intermediately. In addition to numerous extra trains between Waterloo and the West of England on such days, of course, there are additional services between the South Coast, particularly from Portsmouth over the West Moors line, and South Wales. One point to be watched with the latter trains is their length if they are destined for Portsmouth,

for Portsmouth & Southsea (Low Level) can only accommodate a 10-coach train, and sometimes Salisbury has to detach from summer Saturday Western services to Portsmouth to bring them down to this length. At other times, this restriction makes less of Salisbury's handicap that its up local platform can only hold 10 bogies, but does nothing to mitigate the inability of the up through platform to accommodate more than 11, with the result that the tail of some up West of England trains halt off the platform.

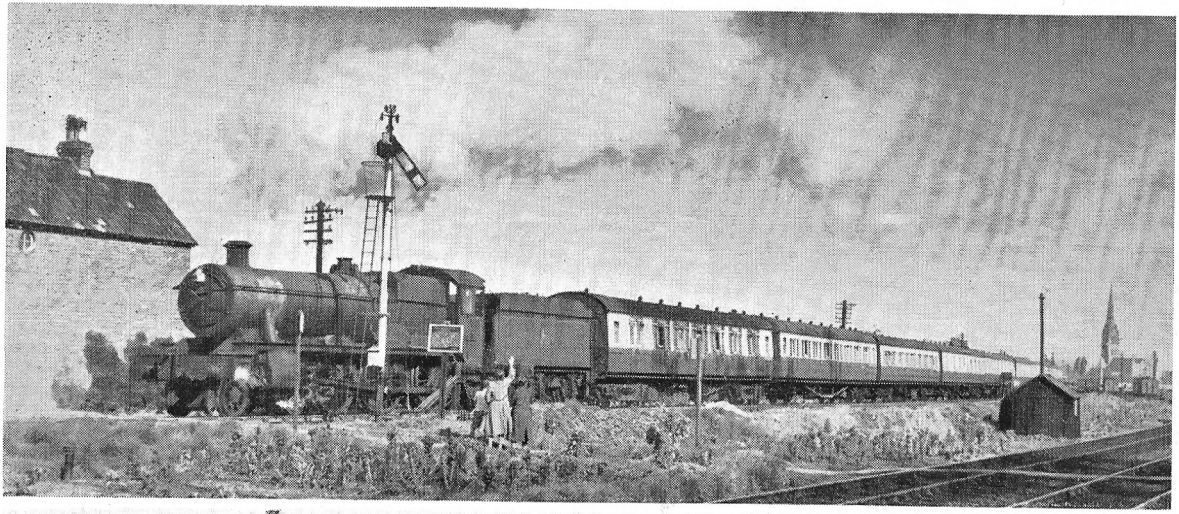
On a summer week-end interchange passenger traffic between the two intersecting routes is far greater than Salisbury's residential business, which is quite prosperous in its own right, for cars bring to the station clients from a wide country area, ranging as far as Wimborne and Shaftesbury. More spartan road transport unloads

at the station its other principal source of passenger revenue—troops from the many military camps in and around this garrison city, who at winter week-ends outnumber civilian passengers ; mingling with them is usually a fair leavening of the Navy, changing trains en route between Portsmouth and Plymouth. The troops are the main reason for one of the two conditional reliefs for which paths are scheduled from Salisbury to Waterloo if traffic warrants them, the Friday 4.35 p.m. ahead of the 12.20 p.m. from Ilfracombe ; the other, more infrequently needed, is a 12.24 p.m. in advance of the 8.15 a.m. from Plymouth.

These reliefs apart, Salisbury has little to do these days with the through trains on the Southern main line except conduct the usual station business and change engine-crews. Exceptions to this routine are the 7.30 a.m. from Exeter, which is strengthened by three coaches at the rear during its stop ; the "Atlantic Coast Express," which in the down direction sheds a Seaton coach for attachment to the 12.46 p.m. stopping train to Exeter, and in the up direction attaches a through section from Yeovil Town brought in by the 8.55 a.m. stopping train from Ilfracombe (in summer the Yeovil section is attached to the 9.35 a.m. from Padstow, when this train is running) ; the 5 and 6.54 p.m. from Waterloo, which shed their rear portions at Salisbury ; and the 6 p.m. from Waterloo, which is lightened by a coach. There is also, of course, business with parcels vans on various trains during the day.

A few years ago engine changes at Salisbury on the services between Waterloo and the West of England were cut out, and now the regular all-the-year-round through passenger trains have no more than a change of engine-crews. A number of the Saturday extras in the summer, however, do take on a fresh engine, such as the 7.33 a.m. Waterloo-Padstow and Bude, the 8.35 and 10.15 a.m. Waterloo-Ilfracombe, the 10.45 a.m. Waterloo-Seaton and the 11.15 a.m. Waterloo-Plymouth, the 9.25 a.m. Sidmouth-Waterloo, 9.40 and 11.30 a.m. Ilfracombe-Waterloo.

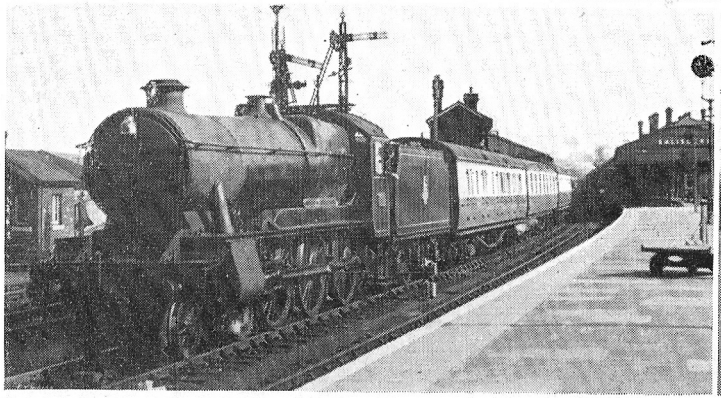
Every train to and from the Westbury line, however, has to change engines, for no Southern engine works north of Salisbury, and although a Western engine does penetrate to Southampton Docks, it does not do so on a through working ; this is a Bristol engine—a 2-6-0 when I glimpsed one of the trains concerned the other day—which heads the 10 p.m. Avonmouth-Salisbury freight, then works the next day's



Left : W.R. 4-6-0 No. 4904 *Binnegar Hall* climbs out of Salisbury on the Westbury line with a Bristol stopping train. In the right background is Salisbury Cathedral. *[G. F. Heiron*

Below left : W.R. 4-6-0 No. 1007 *County of Brecknock* in Platform 3, Salisbury, heads a Portsmouth-Bristol slow train on March 8, 1952. *[R. W. Beaton*

Below right : The prospect westward from No. 4 platform, Salisbury. In the left background is the West signalbox ; behind the G.W.-pattern signal in the centre of the picture is the former G.W. locomotive shed ; and on the extreme right is Salisbury "C" signalbox. *[M. A. Arnold*



3.7. p.m. (6 p.m. SO) Salisbury-Southampton Docks freight, returns to Eastleigh on the 8.4 p.m. parcels from Southampton Docks (light, SO), regains Salisbury on the 9.44 p.m. passenger from Eastleigh, and finally sets out for home on the 3.30 a.m. (MX, 4.30 a.m. Sun.) freight from Salisbury to Avonmouth.

The former G.W. motive power depot was closed in November, 1950, and is now a temporary museum caring for the preserved Adams 4-4-0 No. 563 and the " Terrier " tank *Boxhill*. Its 65 ft. turntable is still used to ease pressure on the Southern shed, especially at summer week-ends. All the Western engines visiting Salisbury, therefore, are now serviced at the 10-road Southern depot, to which an engine road, operated as a single line between Salisbury West box and a pointsman's hut near the shed, avoids cluttering up the main line with light engines.

Only " Kings " and the hefty " 4700 " Class 2-8-0s among the ex-Great Western types are barred from the Westbury line (although No. 4701 did slip through on a wartime occasion when Bristol was hard pressed for motive power) ; " Britannias " are permitted, but so far their appearances have been limited to a week's trial with No. 70027 (86A) on the 1 p.m. from Cardiff and 5.20 p.m. back from Salisbury in July, 1953. Nowadays Canton shed sends other standard types through to Salisbury, for on a recent visit I noticed " 4 " 4-6-0 No. 75007 bring in the 10.27 a.m. from Bristol. " Counties," " Castles " and " Halls " are the usual Western performers on passenger jobs, while " WD " and Western " 28XX " Class 2-8-0s, 2-6-0s, 0-6-0s and sometimes eight-coupled tanks make their way through from Severn Tunnel Junction and sheds beyond with freight turns. In wartime even a Rhymney 0-6-2 tank, No. 43 of Radyr, turned up on one memorable occasion. To-day there are about a score of daily Western locomotive workings into Salisbury.

Watching " Castle " No. 7011 take over the 11 a.m. Brighton-Cardiff from a Brighton " West Country " at Salisbury the other day, my eye caught the green cap badges of the " Castle's " engine-crew. Later I learnt, not only that this is one of two daily turns by Salisbury men to Bristol on Western engines (the other is on the 7.44 a.m. from Salisbury), but also that Southern men even have one job through to Cardiff, taking over the 9.33 from Portsmouth & Southsea at Salisbury and returning on the 4.25 p.m. Cardiff-Portsmouth. This last is a post-war innovation, for not only Southern men but also Southern " U " Class 2-6-0s had a daily turn to Bristol before the war, on the 4.20 p.m. from Salisbury and the 9 p.m. mail back.

Although Western men were absorbed in the Southern depot when their own shed was closed, only one is left now in the link of three crews responsible for these jobs. I gathered that the Southern men took quite kindly to " Castles " and especially envied their A.T.C. equipment (I also heard—whisper it not further north—that Western crews coming into Salisbury make no bones about their view that Swindon has nothing to touch a Bulleid Pacific in good fettle !). On freight jobs the Southern crews from Salisbury work no further than Westbury.

Heading the allocation of the Southern shed are three " Merchant Navies," although officially there is only one diagram for them—8.12 a.m. Salisbury-Exeter, 2.30 p.m. Exeter-Waterloo and 10.30 p.m. freight, Nine Elms-Salisbury ; another is often to be found on the 6.45 a.m. to Waterloo—and the third, it seems, is usually under maintenance repair. Then come eight light Pacifics, for main line work to east and west ; 11 Class " S15 " 4-6-0s for freight jobs to the west (although, so best to fit in an early morning freight turn up from Yeovil, one deals with the 12.54 p.m. Salisbury-Waterloo and 6.54 p.m. Waterloo-Yeovil passenger) ; six " H15 " 4-6-0s, mostly for freight, except to the south, where they are not permitted; eight " N15 " 4-6-0s, for Salisbury-Exeter passenger service ; five " T9 " 4-4-0s and three standard " 4 " 2-6-0s for passenger haulage to Portsmouth and Bournemouth (one of the Moguls also handles Bulford branch freights, since this job entails tender-first working) ; two " N " 2-6-0s ; three " 700 " 0-6-0s (fitted for carrying snowploughs) ; two " Z " 0-8-0 tanks (to shunt the East Yard) ; and a miscellaneous stud of tanks for other shunting jobs—two " G6 " 0-6-0s, two " M7 " 0-4-4s and an " E4 " 0-6-2.

Other types, of course, pay their respects to Salisbury every day. An Eastleigh " Lord Nelson " usually arrives on the 10.54 a.m. from Waterloo and returns at 4.5 p.m., while recent additions to the motive power on show at Salisbury are standard " 5 " 4-6-0s from Nine Elms, which pause there between bringing in the 10.45 a.m. from Basingstoke and leaving with the 12.36 p.m. westward, which they haul as far as Yeovil and then take over there the 1.10 p.m. from Exeter. Even standard 2-6-4 tanks, as well as an occasional " Schools " or Brighton Atlantic, have travelled up from the South Coast. Early in February one of the Exmouth Junction " 4 " 4-6-0s, No. 75079, operating from Yeovil shed in place of a Southern 2-6-0, found itself working the 4.25 p.m. from Cardiff on from Salisbury to Portsmouth. Furthest from its home among the daily

trippers to Salisbury is the Plymouth "West Country" Pacific which sets out from Friary on the 6.15 a.m. to Salisbury and returns thence on the through train from Brighton at 2.3 p.m.

Salisbury crews work other "Merchant Navy" Pacifics than those of their own shed, for they relieve or are relieved in several of the crew changes on West of England expresses at Salisbury—for example, they take over control there of the 8.15 a.m. from Plymouth and the 12.20 p.m. from Ilfracombe. There are about 120 crews on the shed's books, working in 13 links.

Early this year a new 70 ft. turntable was to be installed in place of the old 65 ft. one at the Southern shed, which was incapable of turning the fully loaded weight of one of the "Merchant Navies" with 6,000-gallon tenders. Talking of Bulleid Pacifics, an interesting piece of equipment now installed at the depot is an electronic apparatus for testing the coupling rods of these engines for flaws. After every 10,000 miles of running the fluted type of rods on the Pacifics are taken down for examination (the newer rectangular-section rods now fashionable are not deemed to require these tests). Pacifics from Nine Elms and Exmouth Junction sheds travel to Salisbury for periodical check-ups of this kind, too.

Salisbury station and its adjoining yards are controlled by three signal cabins. Most modern of them is the 63-lever East box on the down side of the line at the London end of the station, which was converted from low-pressure pneumatic to electro-pneumatic operation in 1950. The West box also has the benefit of electro-pneumatic operation, but its equipment is not so up-to-date as that of the East cabin, since it dates from 1926-7 (for example, the East box has light indicators for every lever, showing the position of the points and signals they control, which the West box has not). Originally the station was signalled from another box near the London end of the platforms, but this was dismantled during the 1901 station reconstruction.

The third of the present cabins is Salisbury "C," the least important but, with a mechanical frame of 93 levers, the biggest of the trio. This is a standard large-size box in the old Great Western style, controlling the former G.W. station and the connection from the Westbury line to the Southern station. It took me some time—and its present signalman told me he did not feel at home at once—to get used to the fact that this box is offering eastbound trains to and accepting westbound trains from a box to the west of it, for the West cabin is well on its Exeter side, and the latter is in charge of the western end of the station. The signals admitting from the Westbury line to the platforms and the down local platform starter are locked with both boxes.

Modernisation's first impact on Salisbury will be the abolition of "C" box and the absorption of its functions in the West cabin. The old Great Western station will be altered and some of its roads lengthened to improve it as a goods storage depot (it has been pressed into use as a passenger station at least once since its closure as such, owing to a blockage in the Southern up platforms). At the moment, of course, the retention of "C" cabin means that every freight shunting movement in the old G.W. station is still subject to unnecessary control from a lever frame.

Incoming freights from the Westbury line are passed through the station to the 17-siding East yard, on the up side of the line at the London end; if the yard is temporarily unable to accept them, there is a reception road between the Westbury and Exeter lines west of the station where they can be stored to await a path through the platforms. The East yard, which was enlarged during the last war, handles all traffic from the W.R. and the West of England and marshals it for destinations to the south and in the London direction. Technically, all arriving Western freights are considered to terminate at Salisbury; a few do carry on to the south untouched, except for the substitution of Southern engines and train men, but most are broken up in the East yard. Some through Southern freights from the West of England, however, are examined and watered in the station and avoid the yard.

Traffic from the London direction and the south coast for the West of England is dealt with in the West yard, on the down side at the Exeter end of the station, and opposite these sidings, on the up side of the line, is the former G.W. Fisherton yard, which now handles all traffic for Westbury and beyond. There are some half a dozen transfer trips a day in each direction between these yards, hauled wherever possible by an engine that has to make the journey through the station in any event for other operational reasons, to economise in motive power—hence the stories one sometimes hears of unlikely engines acting as Salisbury yard pilots.

The former passenger station at Milford is now, as I said earlier, the city's goods depot, with accommodation for 650 wagons in its sidings and a daily traffic of 80 to 90 wagons. In addition to transfer trips to and from the yards at the main station, it is the terminus of two daily freights from Wimborne and one from Eastleigh, and dispatches similar balancing trains in the opposite direction.

Before we leave Salisbury, I must not overlook the interesting single line branch which trails into the east end bay platform of the main station on the down side, just by the East signalbox. This, the Market House branch, is claimed to be the shortest privately owned branch to standard gauge in the country. It dates from 1856 and would appear originally to have crossed the river on a girder bridge which still exists, and run inside the old Market House on the opposite bank. Now it terminates on the railway side of the stream in sidings which serve an electricity plant, a malt factory and other industries. These sidings are shunted twice a day.

Finally, I must record with pleasure my grateful thanks to the Stationmaster, the Shedmaster, the Goods Agent and other members of the staff for their forbearing help with my enquiries during a recent visit.

The Great Central eight-coupled tanks

by R. A. HAWLEY

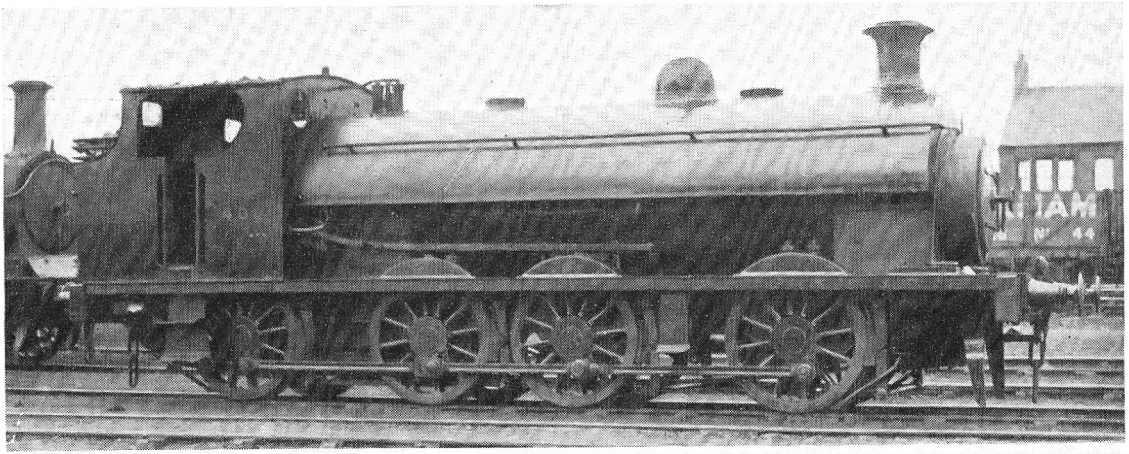
THE Great Central Railway contributed four 0-8-4 tanks to the L.N.E.R. stock in 1923. These engines, designed by Mr. J. G. Robinson and built by Beyer Peacock in 1908, were Nos. 1170-3 of Great Central Class "8H"; they were renumbered 6170-3 and classed "S1/1" by the L.N.E.R. They were designed for "humping" in the concentration yards at Wath, where much of the coal traffic from the West Riding is re-marshalled before starting the climb over the Pennines through Woodhead Tunnel to the industrial areas of Lancashire.

For over twenty years these engines, based on Mexborough shed, gave excellent service at Wath, only leaving the area for their periodic shopping visits to Gorton. The gradient up to the "hump" at Wath is 1 in 107 and the maximum load these engines could handle was 45 loaded 10-ton coal wagons, though with this weight they sometimes had trouble in restarting on a slippery rail. In order to increase their capabilities Sir Nigel Gresley decided to fit a booster to the rear bogie. In 1932 No. 6171 went to "The Tank" (Gorton Works), where she was rebuilt with a superheated boiler and a booster. The latter was interesting in that it was reversible, a novelty in a booster though an essential feature in a shunting engine. The result was Britain's most powerful tank locomotive. This booster had two 10 in. by 12 in. cylinders, which drive through gearing on to the leading bogie axle, and the power was transmitted to the rear bogie axle by outside coupling rods. With the booster in operation the tractive effort was increased from 34,523 to 46,896 lb., and this enabled the engine to work trains of 62 loaded 10-tonners (about 1,000 tons) over the Wath hump. Another new feature of the rebuild was a side-window cab. No. 6171 was classified "S1/2."

As a result of this rebuilding two entirely new engines, Nos. 2798/99, appeared from Gorton Works in May and June, 1932, respectively. These new engines differed from the rebuilt No. 6171 in that the tops of the side-tanks were sloped downwards at the leading end to afford the crew a better lookout, a modification which reduced their water capacity to 2,680 gallons; they also had larger bunkers of 6 tons' coal capacity. Nos. 2798/99 were classed "S1/3".

Sometime in 1930 No. 6171 spent a short time at Dairycoates shed, Hull, so that her performance could be compared with the "T1" 4-8-0 tanks of the N.E.R., but by 1933 Nos. 2798/99, 6170/71 were working at Wath, while Nos. 6172/3 were at March for work at Whitemoor Yard; this was still the position in 1947, by which time Nos. 6170-73 and 2798/99 had become 9900-5 in the 1946 renumbering. In 1943 it was officially announced that the boosters had been removed owing to the impossibility of maintaining them satisfactorily in wartime, but all those engines involved retained their smaller bogie wheels.

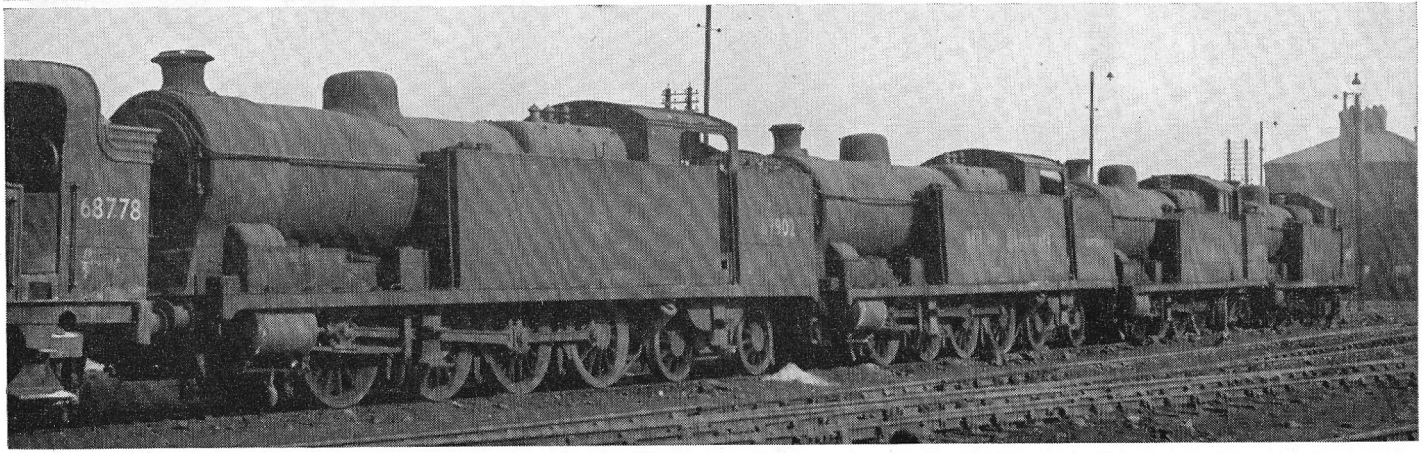
British Railways renumbered the engines 69900-5 and classed them "7F". An influx of diesel shunters drove the two tanks from March and by May, 1950, Nos. 69900/1/4/5 were at Mexborough and Nos. 69902/3 at Frodingham, but in mid-1952 all six engines had congregated at Mexborough. Again they succumbed to a diesel invasion and by the end of 1953 the whole class was in store. Then Nos. 69903/4 were despatched to Immingham for trial as dock shunters, while the remainder were transferred to Doncaster. No. 69903 was soon scrapped and No. 69904 rejoined its sisters at Doncaster, where the tanks were relegated to the mundane duty of shed pilots and the haulage of dead engines from the shed to

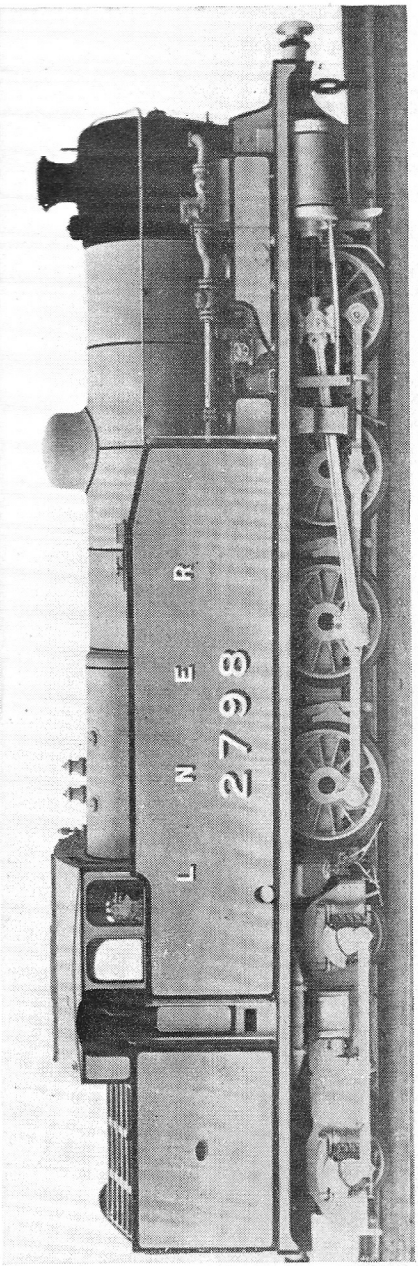


GREAT CENTRAL EIGHT-COUPLED TANKS

Left : The former Wrexham, Mold & Connah's Quay 0-8-0ST as Great Central No. 400B at Wrexham.
[W. H. Whitworth

Below : A forlorn line of idle "S1" 0-8-4Ts at Doncaster. From left to right they are : "S1/1" No. 69902 with Robinson chimney ; "S1/1" No. 69900 with L.N.E.R. Thompson chimney ; "S1/3" No. 69904, an ex-booster engine with side-window cab and cut-away side-tanks ; and "S1/2" No. 69901 with side-window cab, the first of the booster engines.





Right: L.N.E.R. No. 2798, one of the two "S1" 0-8-4Ts built with a booster in 1932, in its original form. [*British Railways*

CLASS "S1" 0-8-4 TANKS—DIMENSIONS

	As built	Rebuilt with booster
Coupled Wh. Diam.	4 ft. 8 in.	4 ft. 8 in.
Trailing Wheels	3 ft. 7 in.	3 ft. 2 in.
Wheelbase Total	30 ft. 8 in.	30 ft. 8 in.
Cylinders (3)	18 in. by 26 in.	18 in. by 26 in
Heating Surface :		
Tubes	1,778 sq. ft.	1,349 sq. ft.
Firebox ...	153 sq. ft.	151 sq. ft.
	1,931 sq. ft.	1,500 sq. ft.
Superheater ...	—	242 sq. ft.
Boiler Pressure ...	200 lb.*	180 lb.
Grate Area ...	26.25 sq. ft.	26.25 sq. ft.
Weight in w.o. ...	96¾ tons	104 tons 9 cwt.
Water capacity ...	3,000 gallons	2,970 gallons
Coal ,, ...	5 tons	5 tons

* In 1929 Nos. 6172/3 were fitted with superheated "O4"-type boilers of 180 lb. pressure and had their weight increased to 99 tons.

the works. It was not long, however, before they were stored out of use and now Nos. 69900/2/4 have been broken up (oddly enough, at Darlington), and only Nos. 69901/5 survive precariously at Frodingham, where one at least was still at work shunting the yards at the end of April.

In addition to these 0-8-4 tanks the Great Central handed over to the L.N.E.R. a strange 0-8-0 tank, which had been acquired from the Wrexham Mold & Connah's Quay Railway. It is very difficult to trace the actual origin of this locomotive. In March, 1874, the W.M. & C.Q.R. purchased from the L.N.W.R. two 0-6-0 saddle tanks, originally believed to have been 0-6-0 tender engines. One of them became W.M. & C.Q. No. 6, and was named *Queen*. It had 4 ft. 8 in. wheels and 18 in. by 24 in. cylinders. In 1877 this engine was withdrawn, but in 1880 it was reconstructed as a 0-8-0 tank and worked on the Buckley branch until 1888, when it was again rebuilt, this time as a 0-6-2 tank—it is thought that the trailing wheels came off an old tender. In 1892 the engine was rebuilt once again with saddle tanks and the result was almost a new engine. Its dimensions were :

Coupled Wheels	4 ft. 6 in.
Trailing Wheels	3 ft. 6 in.
Total Wheelbase	18 ft. 6 in.
Cylinders (2)	18 in. by 24 in.
Heating Surface	1,961 sq. ft.
Grate Area	15.25 sq. ft.
Boiler Pressure	150 lb.

This long suffering locomotive was yet again rebuilt in 1903, this time as an 0-8-0 saddle tank, with a 170 lb. pressure boiler. It was taken over by the G.C.R. in October, 1905 and became No. 400 (later 400B). It lasted just long enough to come within the scope of this article as it was taken over by the L.N.E.R., but withdrawn in October, 1923.

BRITISH BUILT

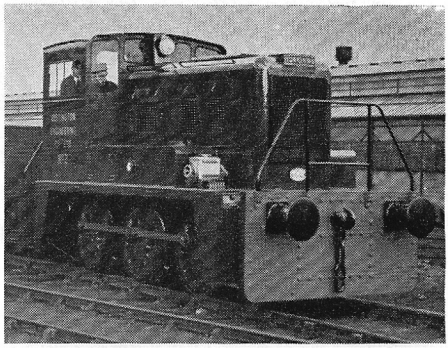
Introducing "Janus"

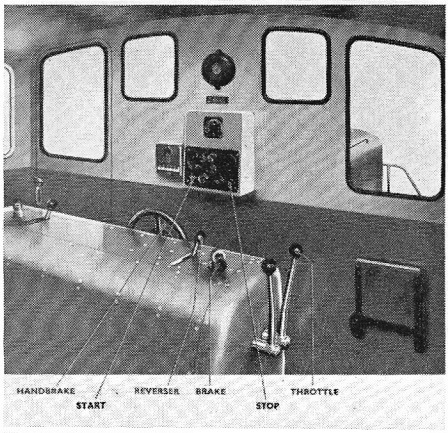
Many interesting locomotives are built every year in the shops of private British manufacturers, in addition to those constructed in British Railways workshops. In this feature we report from time to time on the output of Britain for railways at home and overseas.

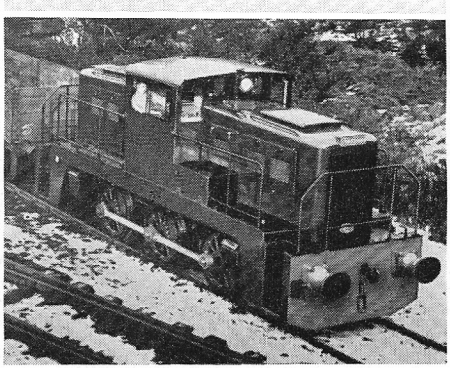
AN important new addition to the fold of British-built diesel shunters was impressively demonstrated at the Appleby-Frodingham Steel Company's works at Scunthorpe on April 26 last. This great plant, which is one of the largest steelworks in the country and now employs over 10,000 in the 1,150 acres of its premises, is a member of United Steel Companies Ltd. ; and United Steel, since 1945, has also included the old-established firm of the Yorkshire Engine Co., which dates from 1865.

The Yorkshire Engine Co. is now finishing probably the last steam locomotives it will ever have on its order books, a batch of "94XX" Class 0-6-0 tanks for the W.R. From steam the Y.E.C. turned in 1948 to diesel production in collaboration with the British Thomson-Houston Co., who provided the electrical equipment for 275 and 400 h.p. versions of a standard Y.E.C. diesel-electric shunter embodying Davey Paxman diesel engines. This type is still in production and under development, but meantime the Y.E.C. has been working on "Janus", a new design that also marks the entry of Rolls-Royce into the railway motive power business for the first time.

Like the English-Electric "Deltic", but in a smaller way, the "Janus" has been built round an engine which has already been proved in other equipment. This is the Rolls-Royce C6SFL 200 h.p. oil engine, which powers the well-known Euclid tippers and dumpers, for example. "Janus", then, starts with the economic benefit of a mass-produced power plant. But in addition, by adopting a high-speed diesel engine in the automotive range, the Y.E.C. has provided "Janus" with an engine generator set considerably smaller than is usual in locomotives of this horsepower, with the result, not only that first cost and maintenance is reduced, but a considerably smaller bonnet can be fitted, giving a much better all-round visibility from the cab. Compare the panoramic view the "Janus's" driver enjoys, for example, with the more limited outlook of the man in a standard B.R. 350 h.p. shunter, peering along the sides of that massive bonnet. This clear view in all directions is perhaps even more of an asset in crowded industrial surroundings than in a B.R. marshalling yard. Another advantage of the smaller engine-generator equipment is that most of the engine's weight is under its rigid steel frames, so







Top : The single-engined 200 h.p. "Janus," showing one now employed by the Distington Engineering Co. in Cumberland. **Centre :** Interior of the cab of "Janus." Notice the simplicity of the controls, and the isolation of the control desk in the centre of the cab so that the driver can operate from either side or end of it, according to the direction in which the locomotive is running. **Bottom :** The double-ended 400 h.p. "Janus," with centre cab.

that it is a much stronger machine than others of comparable power.

To drive the "Janus" is far simpler than steering a motor-car. The control desk is isolated in the centre of the roomy cab, so that the driver can move round it at will when he wants to vary his vantage point. The only controls he has to master are start and stop buttons, throttle, brake and reversing levers and a foot pedal controlling the sanders; all these levers are duplicated on both sides of the cabin, so that he can drive from any part of the cab, according to circumstances. The throttle is directly connected to the two engine governors and also operates the main contactors, and the reverser is mechanically interlocked with it.

It is impossible for the driver unwittingly to overload the diesel engines, because the generator characteristics adjust the speed of the locomotive to suit the tractive effort required. This system of control provides a continuous and entirely smooth variation of locomotive speed and tractive effort between standstill and full horsepower, simply by varying the engine speed. Unlike diesel locomotives fitted with other types of transmission, the fullest utilisation of horsepower is achieved. When limited horsepower is required for light duties, one engine-generator set can be shut down.

"Janus" comes in two sizes. A 200 h.p. single-ended version incorporates one Rolls-Royce engine and generator only, and can be supplied as an 0-4-0 or an 0-6-0, in both cases adaptable to 4 ft. 8½ in., 5 ft. 3 in. or 5 ft. 6 in. gauge. The 0-6-0 can negotiate 100 ft. radius curves with its 9 ft. wheelbase, and the 0-4-0, with a 6 ft. wheelbase, curves of 60 ft. radius. In both types a single traction motor is hung on the trailing axle; both put out a maximum tractive effort of 18,000 lb. and a continuous tractive effort of 7,400 lb. at 7 m.p.h., and both have a maximum speed of 20 m.p.h. It is the 400 h.p. version, double-ended after the American fashion, with two Rolls-Royce engines and a traction motor hung on each outer axle, that suggested the name of "Janus", the ancient Roman god who faced both directions at once. The large-size "Janus" again is adaptable to three gauges. It has a wheelbase of 11 ft., weighs 48 tons and can negotiate 120 ft. radius curves; it is capable of a maximum speed of 23 m.p.h., a maximum tractive effort of 30,000 lb., and 13,100 lb. continuously at 8 m.p.h.

After inspecting the 400 h.p. "Janus", we saw Appleby-Frodingham put it through its very capable paces. At the moment Appleby-Frodingham is one of the last major strongholds of industrial steam in Britain. A complicated network of railways winds in and out of the giant mills and oven buildings, in and out of the shadow of towering blast furnaces, uphill to the extremities of the slag heaps and down to the nearby ore workings, and totals 120 miles of track in all. Loud and clear above the confused roar of steelworks activity rises continually the fierce blasting of a fleet of some 50 0-6-0 tanks as they go pounding up 1 in 60 grades with 300 tons of ore behind their bunkers, or straining away with 400 tons of ingot casting cars, or merely potter about some methodical shunting in the flat yards on the property. Almost every moment of the time I was at Appleby-Frodingham the deep-throated exhaust of a tank in the toils was darkening some corner of the horizon with a wonderfully photogenic cumulus of greying smoke.

It was all very thrilling, but hardly economical, especially in these days of steam coal scarcity—and that despite the fact that Appleby-Frodingham takes the most jealous care of its chunky little stud of Stephenson & Hawthorn 16 in. saddle-tanks and Robert Stephenson 18 in. side-tanks (these seem to form the bulk of the stock), and expects a great deal of them. Some 60,000 tons of the 90,000 tons of ore the plant requires each week are mined close by and have to be heaved up grades of 1 in 60 or 70 into the works area. This traffic makes up a large proportion of the 300,000 tons of materials the locomotive stock has to deal with each week, a weight of work which has driven those responsible for the engines to screw up their maintenance to produce a 74 per cent availability, at any moment, despite the 24 hours off once weekly each locomotive has for boiler wash-out, examination and repairs.

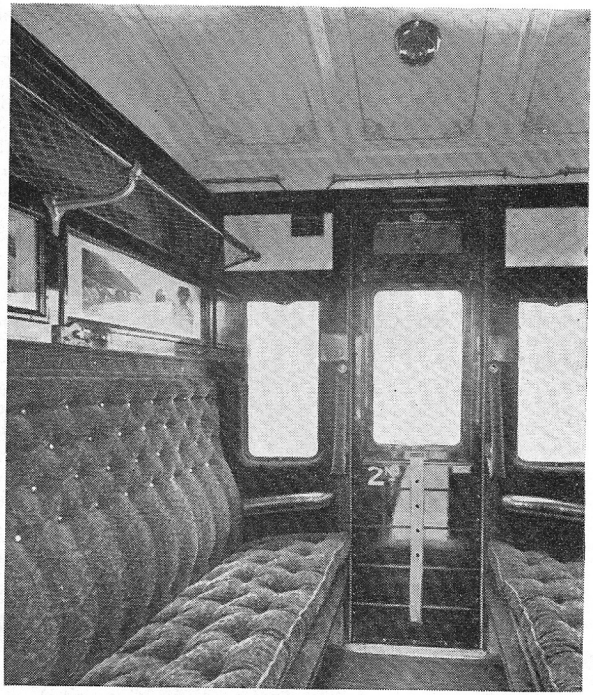
Thus, when Appleby-Frodingham decided some years ago to dieselise, they were looking for a sturdy, reliable machine to standardise that could stand up to continuous hard slogging. In the "Janus", produced by their companion firm, they consider they have found it, and the demonstration I saw was convincing.

After watching a hefty 18 in. 0-6-0 sidetank, only two years old, straining mightily up the 1 in 67 bank from the ore workings with a load of 300 tons and making a magnificent show of sound and smoke but hardly of speed, we saw "Janus" rumble contentedly up the same gradient with the same load at more than twice the pace. Its capacity to deal with heavier loads in short bursts of power was then demonstrated as it romped away with over 500 tons of ingot casting cars in another part of the plant. On the maintenance and servicing side, "Janus" will be able to operate for nine days continuously without a break on its 400 gallons' fuel

(*Concluded on page* 265)

Second Class

By
HAMILTON
ELLIS
F.R.S.A., A.I.Loco.E.



★ Interior of a second class compartment of an L.N.W. 57 ft. corridor composite, No. 1833, in the first decade of this century. *[British Railways*

THE forthcoming changeover from a nominal three-class system to the provision of first- and second-class carriages only on British and other railways, suggests the need for a brief valediction to that other thing, the old Victorian second class. For soon, at home, third class will be second, while in many other countries, not only will third be second; second will be first. We shall be doing what Australia, Mexico, and some other nations have always done.

Railway passenger classes have already received very erudite attention from Charles E. Lee, and the present article is concerned rather with what second class used to be in Great Britain. It began, of course, as something quite inferior. The Great Western Railway was at first a two-class line, but the second class quickly split into "second class open" and "second class closed." Then to these were added the common wagons, so that the G.W.R. transformed itself, for a time, into a four-class line.

Second class, having started as a thing for the *Lower Orders*, was thus elevated into something else, a provision for bagmen, junior clerks, virtuous widows in straitened circumstances, and other people who could scrape half-crowns together but who did not carry sovereigns loose in the pocket. In the 1850's, previously having been a wooden coop plastered with advertisements, the second-class carriage was favoured with severely stuffed seats and backs of shiny leather. At that, it became respectable. It was part of the furniture of the great, new, Victorian Middle Class.

Certain railways never had second class. The Great North of Scotland was one. It served a country where everybody but the aristocracy watched the pennies very closely, so there was no second-class user. Furthermore, the Great North company also watched every penny, and put its third-class fares rather higher than other people's seconds. The first of what may be called the giants to discard second class was the Midland under James Allport, which began by conveying third-class passengers in all its trains, then stuffed the seats and backs and abolished second class altogether, as from January 1, 1875. The London & North Western, and the Great Northern, were furious, but the revolution had begun.

Thereafter, the decline of second class took different forms. Some companies made very superior second-class carriages, to lure people who could pay for extra comfort but who yet regarded the first class as *extravagant*. (It is odd, how much more aware of extravagance were those generations who had no motors, no television, no five-day week, and no hire-purchase except the thrifty sort offered by banks and building societies !) Second class was seen at its best in Great Britain on the southern lines. The corollary to this was that on the South Eastern, and the Chatham, and all too often on the Brighton lines, the third class was very awful indeed. Sir Edward Watkin of the South Eastern made this his stated policy, to bolster up his

second class. But from the late 'eighties onwards, the South Western company made quite good third-class carriages, put them on all the express trains, and still maintained a distinctly superior second class. This, of course, was a thrust against the Great Western, which kept third class off its best trains for a very long time.

On the northern lines, second class declined visibly. The Great Northern's idea of " second " was to have a mat on the floor and a " 2 " on the door. Otherwise, the carriage was patently " third." It is not surprising that on the G.N.R., second-class accommodation became a means of protecting the cheaper season-ticket holders from overcrowding and otherwise vanished. The same sort of thing happened on the Great Eastern, where, however, the suburban third class was an even grimmer thing than on the Great Northern, to be avoided if you could afford to do so. The London & North Eastern perpetuated this brand of second class until class distinctions vanished altogether from suburban trains during the late war, and survived only in Anglo-Continental expresses at exorbitant fares.

In the old days, the London & North Western Railway generally had very comfortable carriages, though sometimes they were rather cramped, especially the early corridor types. The third class was excellent, and the second class, unlike the Great Northern's, was visibly superior to that. Still, it was in the South that second class came nearest to holding its own.

On my native London & South Western Railway, in the days before 1918, there was a strict order of passenger seating. On a standard corridor train, first-class compartments seated two a side ; second class, three ; and third class, four. Thus it followed the conventions of Germany, a country that shared, with the Scandinavian nations, the best second class in the world, while supporting not only a wooden third class but a fourth class also. The South Western's non-corridor sedilation was : First class, three ; second class, four ; third class, five. A South Western main line non-corridor second had, on a full-width partition, one intermediate padded-leather elbow-rest, dividing two couples of passengers. It was lavishly upholstered in figured brown plush, gold-laced and buttoned in. There was a thick leather-padded squab on the door panel, as in the first class. Ceiling and partition panels, apart from the facias with their pictures, were covered with rather ornate lincrusta-walton, and the mouldings were picked out in gold paint.

On the South Eastern, whose third class was often so mean, the second class was generally similar to the South Western's but the trimming, in dark green or black, figured in crimson and orange, was more rich-looking in a sombre sort of style. Further, the seats were undoubtedly more yielding. South Eastern second class was the best in Great Britain, just as the same company's older third class was the worst, apart from paddy trains serving colliery districts.

The same can scarcely be said for the Brighton variety of second class, though it was much better than the Great Northern. Where the Brighton company allowed a lavatory door, the seats often just stopped at the gap, even in the best " balloon " stock. There were neither arm- nor head-rests. If, after a heavy day of business or pleasure, you went to sleep, you fell into the passage, and as you picked yourself up from that humiliating tumble, the neatly moulded ceiling with its elegant electrolier was a poor consolation for the reproving stare of the lady opposite.

Wherein was the decline of the second class, more especially in the South of England ? The South Eastern & Chatham remained faithful to it, but it did not long survive the Southern Railway's new dispensation, except on the Continental expresses already remarked. Perhaps its causes were social. Use of it stamped you indelibly as *middle class*. If you wished to be thought *educated, cultured, of top-drawer antecedents*, or whatever, you could travel first-class because you were rich, or third-class because you were poor, without losing caste. Abroad, of course, you travelled second without loss of face. It was soft, and the third was hard. But in the South of England (writing from personal and family experience), one travelled third-class from Waterloo to Salisbury because it was cheap, and first-class thence in the slow train to Dinton to please one's aunt's coachman who came to meet the train.

Well, well ! The snob that is in most of us must continue to be pleased. We are to have, henceforward, first and second, like the most democratic Commonwealth of Australia. If we like, we may bask in the belief that it is possible to be first-class, rich, and vulgar, or second-class, poor, and intellectual.

" JANUS " (*Concluded from page* 263)

capacity, against the seven days with breaks for servicing of a steam shunter ; and when it is stopped, " Janus " will be turned round in seven hours, whereas the steam engines need 24 hours off for boiler washout and recuperation. This increase in availability means Appleby-Frodingham can contemplate a reduction of spare locomotives to cover stoppages, probably by 20 per cent or more when dieselisation is complete. **A.J.**

C

Danish Journey

By
P. RANSOME-WALLIS

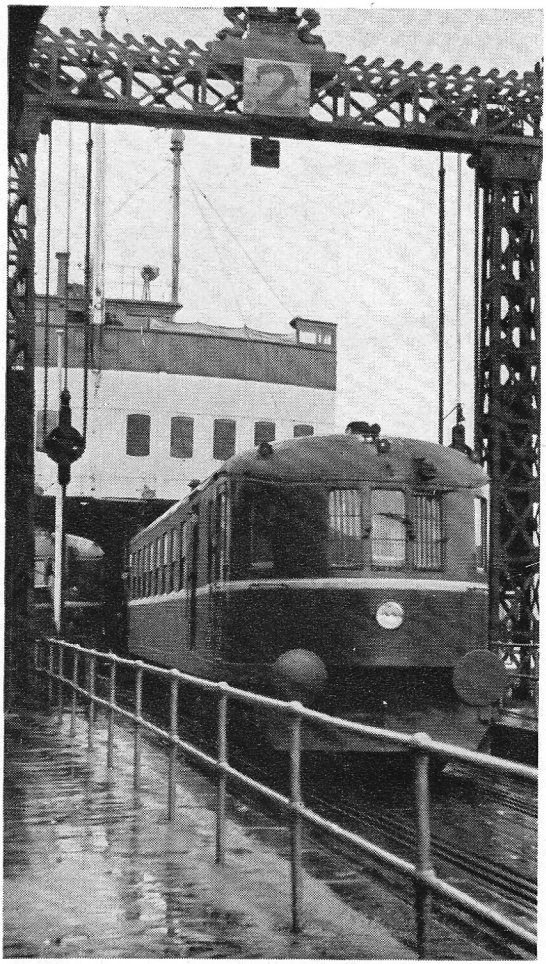
Part One

WHEN Flagler built his Florida East Coast Railway across the many keys or islands, to Key West, all the world heard about the "Railway that went to sea." The railway to Key West has long since become but a memory, but the Danish State Railways might well claim its title, for much of their mileage is made up of sea crossings, either by ferry or by bridge.

Denmark consists of many islands and a long peninsular, called Jylland, which projects into the North Sea towards Norway and Sweden and which, at its southern end, is attached to Germany. To the east, and between Jylland and Sweden, lie the four largest and most important islands of the Danish kingdom. Immediately off the Jylland coast is the island of Fyn, on which the large city of Odense is the most important place. A deep, mile-wide stretch of water—the Little Belt—separates Fyn from Jylland, and since 1935 this has been spanned by a fine bridge which carries a double-track railway and a wide road. Lying to the east of Fyn is the largest island of the kingdom, Sjaelland, with the capital city, Copenhagen, near to its east coast, and the ancient city of Roskilde, home of the kings of Denmark, some 30 km. west of the capital. Roskilde is also of importance as being the home of the first railway in Denmark. In 1847, a line was opened from this point to Copenhagen. It was built by British contractors under the general direction of Robert Stephenson, and forms part of the present east-to-west main line of the Danish State Railways.

Fyn and Sjaelland are separated by the 16 miles of sea known as the Great Belt. In spite of much popular demand, no attempt to bridge this waterway has yet been made and communications between the two important islands are maintained by train ferries and motor car ferries working between Nyborg and Korsor. The older ferry ships are steam, but the fine new ferries of 3,000 tons are diesel-driven and have a speed of 18 knots. From start to stop the voyage across the Great Belt takes 75 minutes.

To the south of Sjaelland are two more large islands—Lolland and Falster. Their importance in communications lies in the fact that they are on the direct line from Norway, Sweden and Copenhagen to Germany. Falster is separated from Sjaelland by the Storstrom, a two-mile wide channel over which a bridge, the longest in Europe, was built and was opened in



★ A train that goes to sea—a diesel "Lyntog" train of the Danish Railways complete is loaded on to the train ferry at Nyborg for the crossing of the Great Belt [*P. Ransome-Wallis*

1937. The many smaller islands of the kingdom of Denmark do not concern us as they do not influence the main rail communications of the country, and indeed, only three others have railways in them.

There are train ferry connections between Denmark and Sweden via Helsingor to Halsingborg and via Copenhagen to Malmo. The direct traffic from Norway and Sweden to Germany and beyond travels from Halsingborg to Helsingor by ferry, thence by rail to Copenhagen and south over the Storstrom bridge to Gjedser on the southernmost tip of Falster. From here, another train ferry makes the 46-mile sea crossing to Grossenbrode in Western Germany. In pre-war days, this ferry link was between Gjedser and Warnemunde, but the latter port is now in Eastern Germany and so the new and increasingly important route to Grossenbrode was opened in 1951. The service is operated by three fast modern ships—one German and two Danish—which also work the greatly reduced service between Gjedser and Warnemunde, making round trips including Grossenbrode as required.

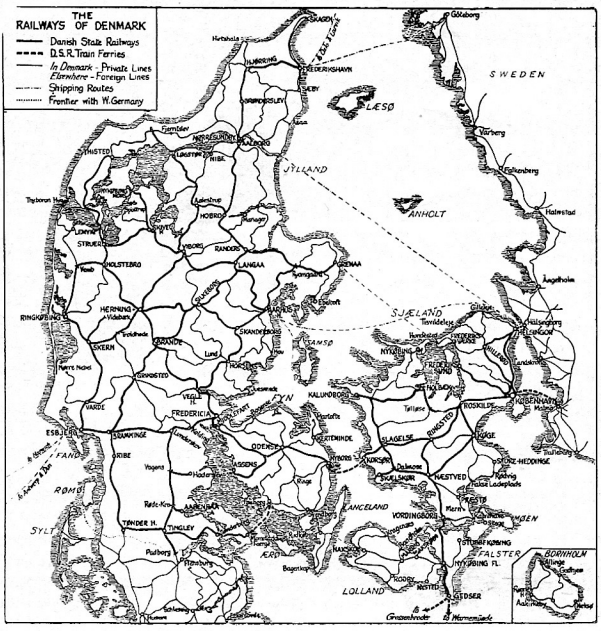
There are many ferry routes between the islands of Denmark, and many steamship services. There is, however, but one other train ferry—that between Faaborg on the island of Fyn and Mommark on Alsen, which has direct rail connection with Jylland. It is interesting that no direct train ferry link exists between Norway and Denmark.

The main lines of Denmark are of standard gauge and are operated by the *Danske Statsbaner* (Danish State Railway), but there are also 45 private standard gauge lines operating in the country. These private lines often run their trains into the main line stations of the State Railway, and provide branch line connections with the main line trains. In some instances, for example at Odense, the State Railway shares its engine shed with a steam-operated private line. The private lines usually operate on light but well-maintained track and their trains are subject to a general maximum speed limit of 80 km./hr. (50 m.p.h.). They are not compelled to fence their tracks but all engines must have cowcatchers. On the State Railways, most of the main lines are double-track with right-hand running, and fencing is compulsory where speeds are normally over 75 km./hr.; this means, of course, that nearly all of the D.S.B. track is fenced.

At the end of 1954 about 50 per cent of traffic on the D.S.B. was steam-hauled, but that percentage is falling as more diesels are employed (there is no electrification in Denmark other than the western suburban system at Copenhagen). Denmark has long been a pioneer in the use of diesels and by 1927 several successful diesel-electric locomotives were in use. In the years that followed, many diesel-electric motor coaches were introduced for service on secondary lines, while in the late 1920's use was made of a number of petrol-engined coaches, which were four- or six-wheelers and really no more than railbuses.

Then in 1935 came the three-coach, high-speed, diesel-electric trains for fast main line services. These trains, painted red and picked out with gold, started the famous *Lyntog* (lightning) services, which have become so popular and which have a high degree of traffic priority both on the main lines and on the train ferries. They are never kept waiting. The most modern trains are now of four coaches, with a motor coach at each end. The diesel-generator sets are placed in tandem—two to each motor-compartment and four for each train.

The latest form of diesel-electric locomotive is the now familiar American General Motors unit, the first of which was purchased early in 1954. These loco-



motives are of 1,500 h.p. and have a simple 8-cylinder 2-cycle motor direct-coupled to a generator. They are being built by Nydquist and Holm, Trollhaten for General Motors.

With my friend, Hugh Le Fleming, I was recently a guest of the Danish State Railways, and we were able to see a great deal of the railway working. Our interest, primarily, is in steam locomotives and the chief mechanical engineer, Herr Hedegaard Christensen, arranged a most comprehensive tour which enabled us to travel on the footplates of most classes of the main line steam locomotives. As I had also brought my car to Denmark, our host planned our journeys to get the best advantage from both forms of travel.

The first impression of Denmark is that it is a very busy country with a lot of railway traffic, and fine wide highways. Although the country is flat, there are many undulations which relieve the monotony of rail or road travel. More friendly and charming people it would be impossible to meet.

We arrived at Esbjerg from Harwich, and were surprised and disappointed to find that the boat train to Copenhagen was in the charge of two diesel-electric motor coaches, one at each end of the train. At the town station, however, we came across quite a lot of steam power—mostly the charming little 2-6-0s of type " D," of which there are several series differing in detail. They seem to be ideal for working in this, the flattest part of Denmark. We motored gently across Jylland to the city of Kolding, and then across the Little Belt bridge into the island of Fyn and to the busy city of Odense. From here, next morning, we rode on the footplate to Nyborg.

The train was semi-fast powered by one of the large 2-cylinder 4-6-0s of Class " R," introduced in 1912. In 1921 the " RIIs " were built by Borsig with three simple cylinders, while Frichs built five more, also with three cylinders, in 1924 ; this last lot are Class " RIII." All of them are very reminiscent of the Prussian State 4-6-0s of Class " S-10," and are but another instance of the influence of this great railway on European practice.

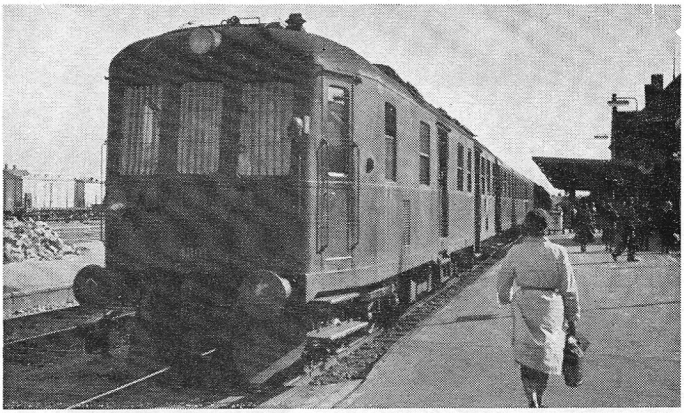
Our engine, No. 945, impressed us at once by the cleanliness of the large and spacious cab—so much so, that it did not seem incongruous that the driver was in uniform with brass buttons, and had gold lace on both shoulders and his cap. Danish engines carry a long handled brush on the footplate, so that the coal dust can be swept more easily away than is the case with the short " hearth brush " used on British engines. We had good Polish coal and although this engine was running without a brick arch, the large firebox ensured that we had plenty of steam. Most of the running was at about 50 m.p.h. with ½-regulator and 30 per cent cut off ; with a working pressure of 12 kg./cm², ½-regulator gave a steam chest pressure of 8½ kg./cm².

The 18½-mile trip to the ferry port of Nyborg was run pleasantly to time, and here we were met by one of Mr. Christensen's assistants, who was to be one of several excellent guides and friends to look after our interests in Denmark. Nyborg is in the process of alteration and expansion, for it deals with a great deal of traffic. Ferries of one sort or another are in and out of the four docks with a frequency and ease that tells of a complete mastery of this form of transport. There is much in their favour, for the Great Belt is tideless and seldom gets very rough. The terminal ports are well sheltered and the main trouble is in keeping them free from ice in the winter. The new motor-driven ferries run ahead into the docks and load and unload their trains over the bow. The forward bulwarks of the ship hinge back in one piece like a giant wish-bone and the trains run off the ship through the arch they form. The link span is of the usual pattern with two pins. Both freight and passenger trains are loaded on and off by standard 0-6-0 shunting tanks, and the train engines do not travel by sea, but in the case of diesel trains with motor-coaches, the whole train runs straight on to the ship. Passengers usually sit in the fine observation lounges on board, in which anything from a snack to a full meal can be obtained during the journey.

The yard at Nyborg is extensive and there are many tracks for sorting and marshalling trains both inward and outward bound. Apart from those lines which have access to the main line, the sidings are operated by hand switches and ground frames. This system has been found to suit the conditions better than does centralised control. The new marine station was not completed at the time of our visit, but it was sufficiently advanced to show the general layout, which is spacious, and permits of easy access from ships in three of the docks. The fourth dock is used for motor-car traffic.

The present engine shed, which is an old roundhouse, will disappear when all the new works are complete. We found some interesting old engines there. One of the last in service of the older series of 4-4-0s of Class " A " was, perhaps, the greatest " find." No. 157 had outside link motion, and in company with all the engines not fitted with turbo-generators, had a conspicuous gas-cylinder on the running plate to supply acetylene gas for the headlight. The engine was built at Chemnitz in 1888.

DANISH EXPRESSES



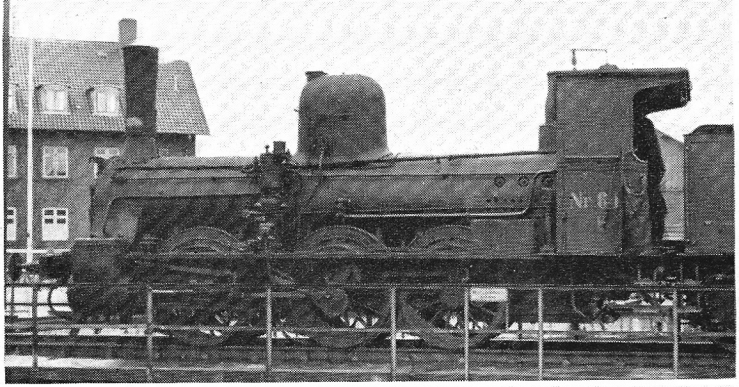
Above : Danish - built 4-cylinder compound 4-6-0 No 997 pulls out of Aarhus with a Copenhagen-Fredericksh avn express.

Centre : Powered by diesel - electric motor coaches at each end of the train an Esbjerg-Copenhagen boat train passes Esbjerg Town station.

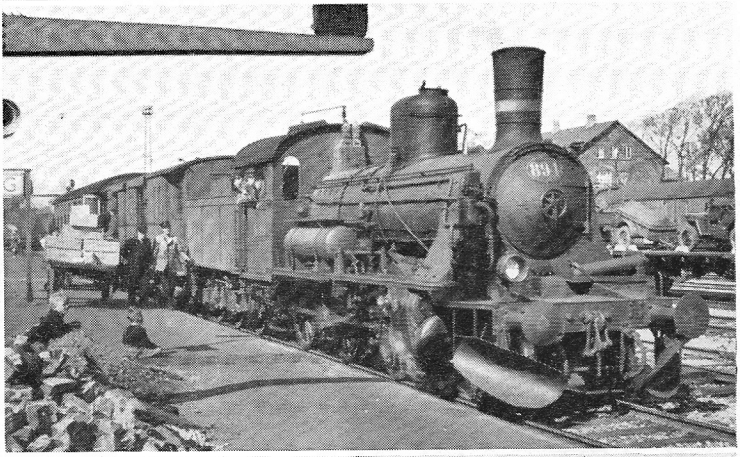
Bottom : A south-bound express leaves Horsens behind one of the General Motors - type 1,500 h.p. diesel - electric units.

[*P. Ransome-Wallis*

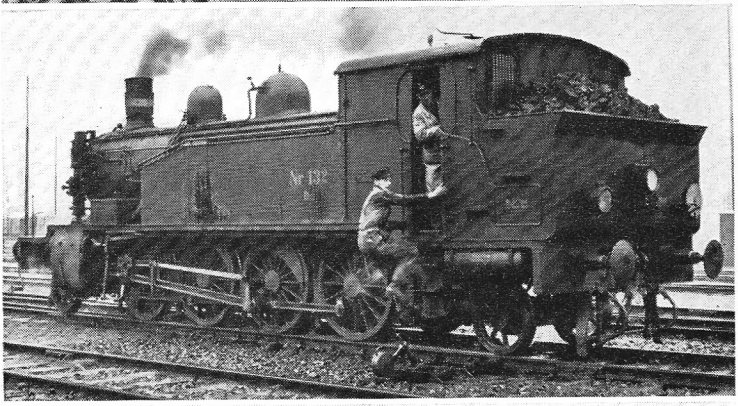
DANISH STEAM POWER



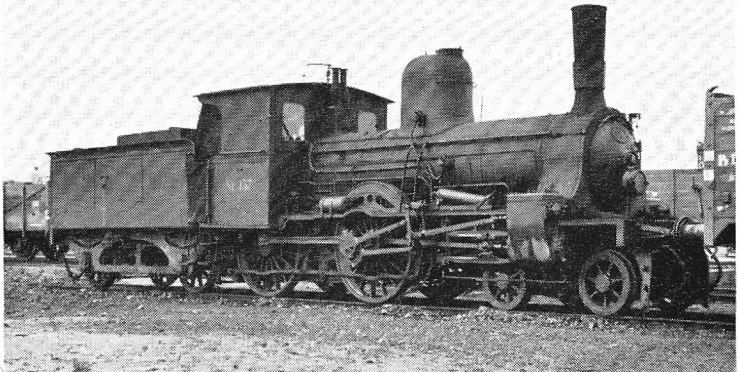
★ No. 646, a veteran 0-6-0 of Class " G "



★ A local train photographed at Esbjerg is headed by No. 894, a Class " D " 2-6-0.



★ A rare bird—No. 132 one of the three Class " DF " 2-8-2 tanks originally built by Henschel for a private Danish railway.



★ The massive dome of this Class " A " 4-4-0 No. 157, looks not far removed in diameter from its boiler ! Note the acetylene gas cylinder mounted on the running-plate for the headlight.

[*P. Ransome-Wallis*

There were several of the old outside-cylinder 0-6-0s still at work, engines typical of their period, and very similar to those of the old Western Railway of France. Another rare engine which we found here was a 2-8-2 freight tank of Class " DF." There are only three of these engines, which were built for a private railway in 1917 by Henschel. Of larger and more modern engines the 2-10-0 freight engines of Class " N " work regularly into Nyborg. These are of the German " 50 " Class, and the twelve Danish engines were built in Belgium by Cockerill in 1943 during the German occupation of both countries. The main line express trains are worked by the 4-cylinder compound Pacifics of Class " E," of which more anon.

In spite of unpleasant weather, our voyage across the Great Belt to Korsor in the train ferry *Fyn* was comfortable. We had a late but excellent lunch in the huge observation lounge of this fine ship, and on arrival were met by the Assistant Motive Power Superintendent for the Copenhagen district.

The engine on which we were to travel the 68¼ miles from Korsor to Copenhagen was a 4-cylinder compound Pacific of Class " E," No. 983, with a double blast-pipe and chimney. These large compounds are of Swedish design and were first built in 1914 by Nydquist and Holm for the Swedish State Railways. When Sweden electrified her main lines, eleven of them were sold to Denmark in 1936-7, and became D.S.B. Nos. 964-974. A further twenty-five engines were built to the same design in 1943-47 by Frichs of Aarhus. These later engines were modernised in several respects, such as the provision of steel cabs in place of the wood of the S.J. engines, and improvements in the lubrication of the inside big-ends. An extra steam dome with water separator has raised the steam temperature in the steam chest by 80 deg., and some of the later engines have double chimneys.

The design is a balanced compound with two high-pressure cylinders between the frames and two low-pressure cylinders outside. There is a common piston valve for the h.p. and l.p. cylinders on each side, so that there are only two piston valves for the four cylinders. Boiler pressure is 13 kg./cm². A simple change-valve is fitted allowing boiler steam at the reduced pressure of 8 kg./cm² to be admitted to the l.p. cylinders. The cabs are very roomy and, on this occasion, accommodated three " passengers " very easily. Our train, an international express, was made up to 330 tons and we made stops at Slagelse and Roskilde. Overall time for the 110 km. (68¼ miles) is 97 min., of which stops accounted for 7 min.

The engine kept time very easily in spite of two bad signal checks. Until 5 years ago the maximum permitted speed in Denmark was 100 km./hr., but since then it has been raised to 110 km./hr. for steam and 125 km./hr. for diesels. Most drivers of steam express locomotives regard 120 km./hr. (75 m.p.h.) as their safe maximum and often run up to this speed. The driver of No. 984 was no exception to this rule and we went along with the engine giving us a most comfortable ride in the driving rain at 74 m.p.h., with ½-regulator and 50 per cent cut off. With boiler pressure just below blowing-off point this gave a steam chest pressure of 7½ kg./cm² and pressure in the l.p. receiver of 2 kg./cm². Superheated steam temperature was 325 deg. F. I quote these figures as they are typical of many readings taken on similar compounds, and are instructive to those who are not familiar with the operation of compound locomotives.

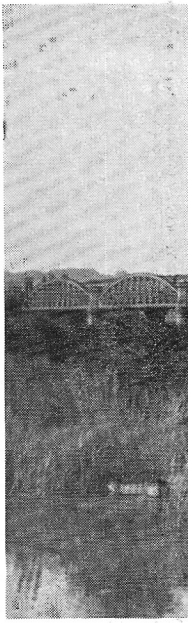
(To be continued)

" The Farnborough Flyer "

ONCE again this year Mr. A. F. Pegler is organising a special train to convey Royal Observer Corps members from the North to the S.B.A.C. Farnborough Air Display. Last year's train, which loaded to 14 coaches and was seriously hindered by delays from engineering works and other causes on its devious route from Leeds to Basingstoke, was all but an hour late in reaching Farnborough, and a new itinerary has therefore been devised for this year's special, which will be equally heavy. For the first time it will include portions from Manchester and Sheffield, and also from Bridlington and Hull, which will be joined to the Leeds portion at Doncaster. The train will then take the East Coast main line as far as Sandy and there, it is hoped, it will diverge on to the Cambridge-Oxford line via the double-track north-to-west curve laid down against an emergency during the last war. No passenger train has yet used this curve, which until recently has been a storing place for displaced G.N. articulated suburban sets from the London area, and Ministry of Transport approval for this stage of the special's journey must be sought. At Oxford the " Farnborough Flyer " will resume its route of former years. Full details of fares, times and other information concerning the train, which will run on Sunday, September 9, can be obtained from Mr. A. F. Pegler at Blyth, Worksop, Notts.

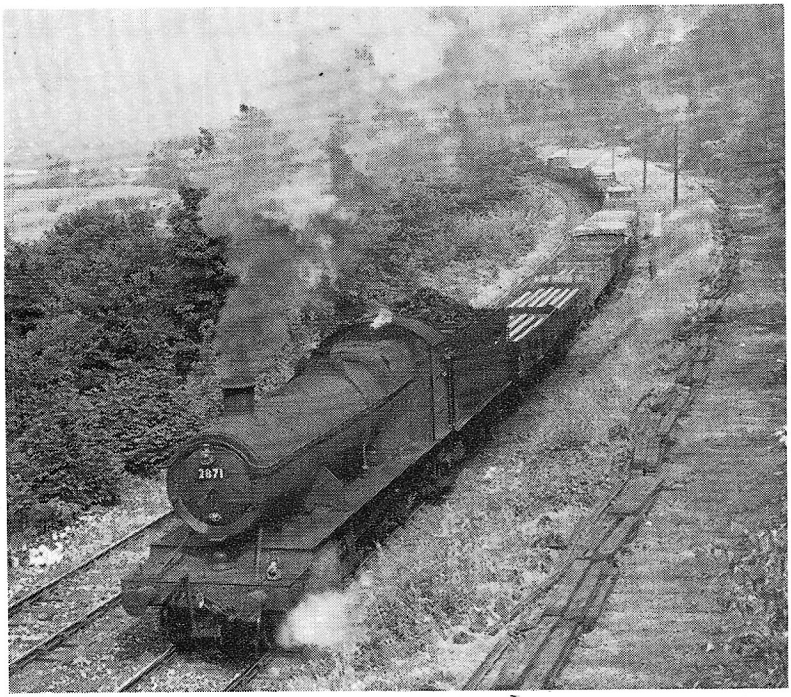
●

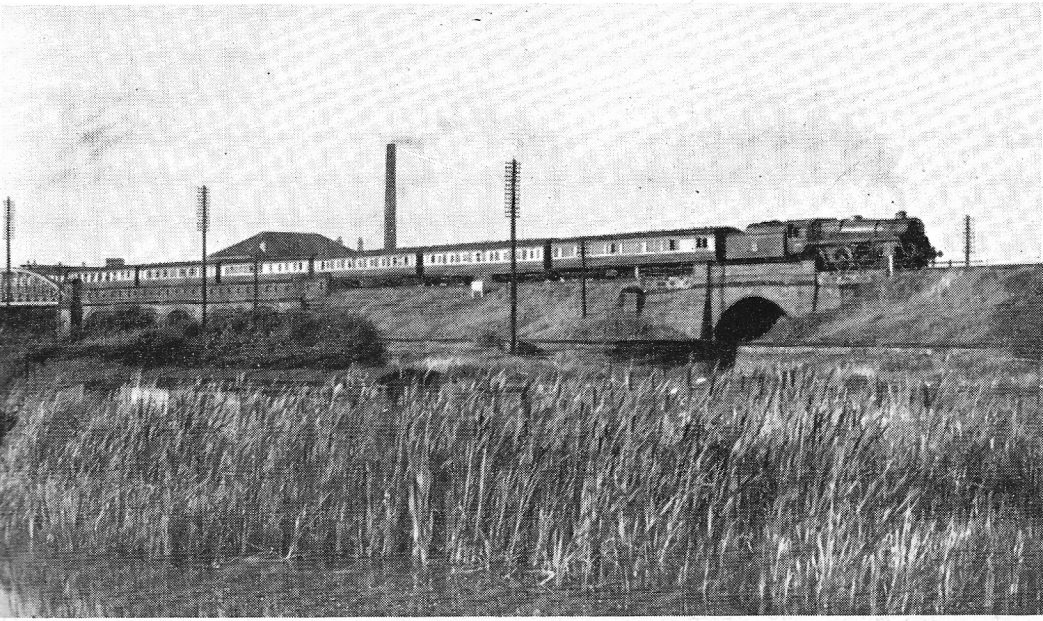
The last section of the Londonderry & Lough Swilly Railway, which was closed down in 1953, *was lifted in March, writes Mr. R. C. Ludgate.*



Above left : W
Sapperton bank,
on May 7, 1955

Below left : Sou
82½ Gresford ban
gallon tender, unu



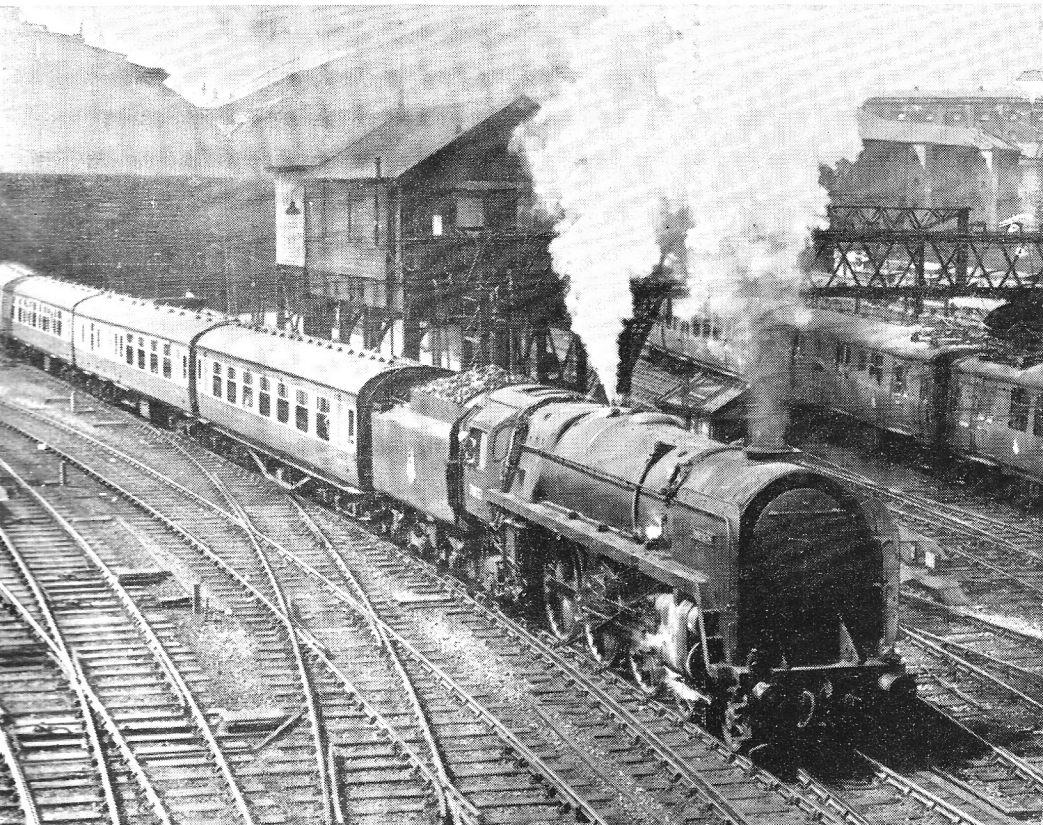


-6-0 No 5040 *Stokesay Castle* pounds up the 1 in 74 of of Chalford, with the 4 p.m. Cheltenham - Paddington [*G. F. Heiron*

und from Chester, W.R. 2-8-0 No. 2871 climbs the 1 in th an up freight on August 13, 1955. Note the 4,000- for this class of locomotive. [*S. D. Wainwright*

Above right : Standard Class "5" 4-6-0 No. 73002 crosses the Trent on its way out of Nottingham with a relief express for St. Pancras on August 1, 1954. [*J. P. Wilson*

Below right : Departure of a Euston express from Manchester (London Road) ; at the head end is Pacific No. 70032 *Tennyson*. [*Eric Treacy*



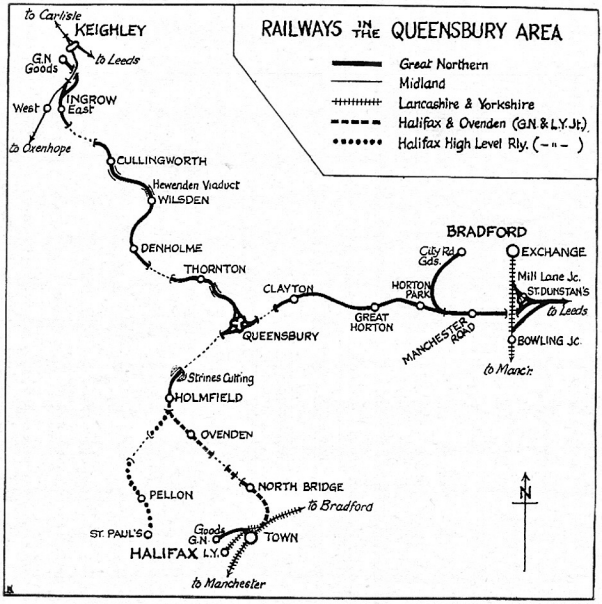
The Queensbury Triangle

By J. F. OXLEY & D. R. SMITH

THE Great Northern branches in the West Riding were likened by the late E. L. Ahrons to "a large-scale White City switchback," for the hilly country traversed by these lines necessitates a constant succession of severe gradients, sharp curves and formidable engineering works. Their contrast with the remainder of the Company's relatively level system could not be more marked. It was here that the Great Northern's small but sturdy locomotives underwent their most gruelling test. The most spectacular section of the switchback lies to the west of Bradford, and is based on a group of lines radiating from Queensbury, which may be referred to as the Queensbury triangle.

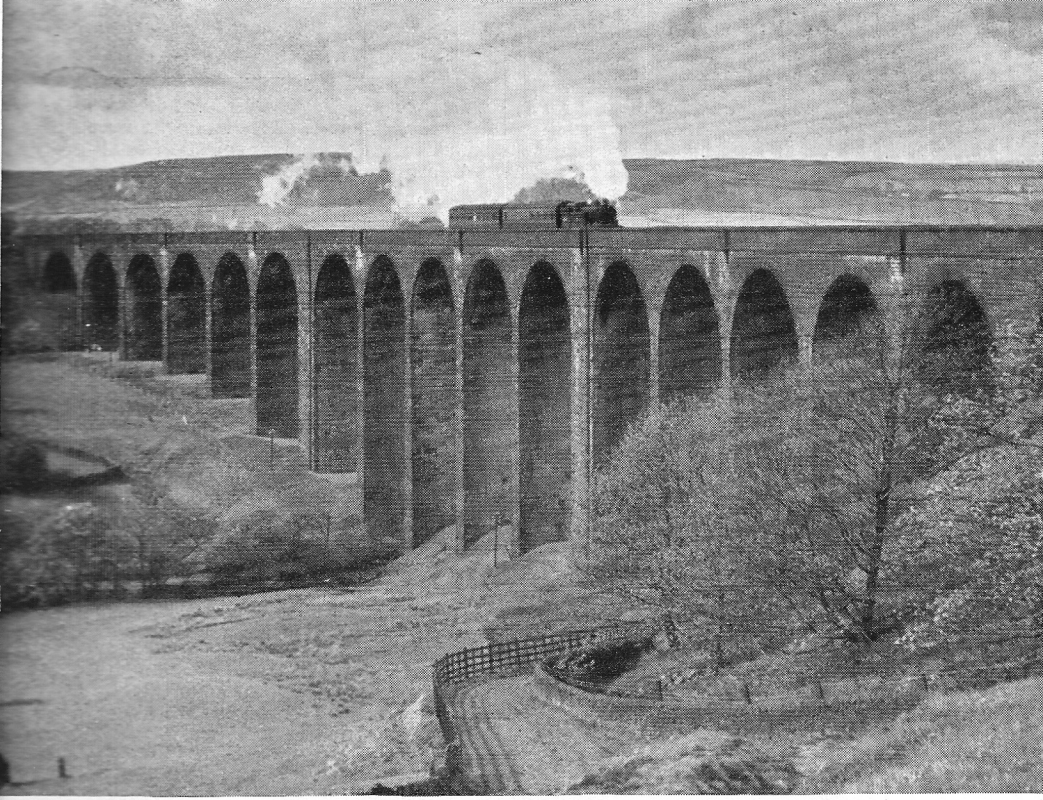
The first railway to enter the district was the Leeds & Bradford, which secured an easy alignment at the expense of a rather circuitous route. Incorporated in 1844, its first chairman was George Hudson, and it eventually fell into the Midland net. In 1846, a Bill was promoted to connect Leeds, Bradford and Halifax by a direct route. Shortly after its Bill received the Royal Assent this company—the West Riding Union, as it was known—was absorbed by the Lancashire & Yorkshire. For reasons best known to the latter (who were already working into Leeds via Normanton), the Leeds-Bradford section was not proceeded with, much to the dissatisfaction of local interests. In 1851, therefore, a new undertaking—the Leeds, Bradford & Halifax Junction Railway Company—was formed to complete the unfinished portion of the West Riding Union scheme. At this time, the Great Northern was anxious to extend its foothold in the West Riding and gave the project every encouragement, thereby straining its already bad relations with the L. & Y. R. to breaking point. Two years later the Great Northern were granted running powers not only over the L.B. & H. Junction line, but also the L. & Y.R., between Bradford and Halifax. On October 1, 1854, the L.B. & H.J.R. was opened between Leeds and Bowling, and from the same date Great Northern trains commenced to run into Halifax.

Thus began the Great Northern's association with Halifax, which foreshadowed the construction of lines through Queensbury. This association pursued a peaceable course until 1863, when the Great Northern proposed to lease the L.B. & H.J.R. on very favourable terms, but opposition from the L. & Y.R. in Parliament brought the scheme to nothing ; revived in 1865, however, and despite renewed opposition from the L.&Y.R., the scheme received Parliamentary approval. Meanwhile, proposals were on foot for a railway from Halifax to Keighley, and a Bill was deposited for the 1863-64 Session, but because of the difficult nature of the country through which construction



Right upper: Class "N1" 0-6-2T No. 69434 crosses the 376 yards-long Hewenden viaduct, near Wilsden, with the 4.18 p.m. Keighley-Bradford on May 14, 1955. *[J. C. W. Halliday*

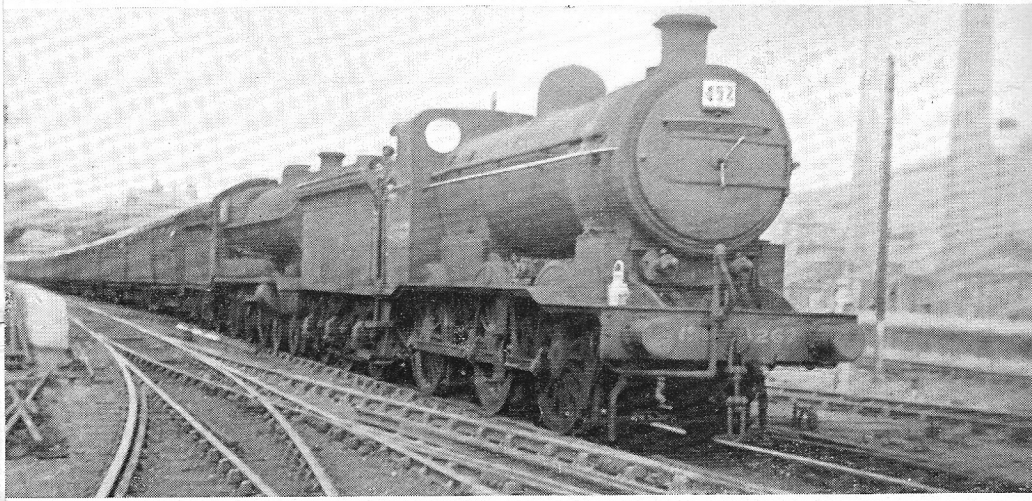
Right lower : Bird's-eye view of Queensbury station, from a point above Queensbury Tunnel. The Keighley line proceeds to the left, the Bradford to the right, while in the foreground Class "N1" 0-6-2T No. 69467 sets course for Halifax with a train from Keighley on May 14, 1955. *[J. F. Oxley*



was proposed, only 2½ miles of the scheme —from Halifax to Ovenden—were sanctioned. The Great Northern and Lancashire & Yorkshire each subscribed £60,000 to the new company—two-thirds of the original capital. Difficulties were soon encountered; deviations from the plans were found necessary, and other money was difficult to raise, so that a further Bill was deposited in Parliament in 1866 for an extension of time.

The G.N.R. and L. & Y.R. by this time had advanced as much as £24,000 for preliminary expenses. In order to safeguard their money, and at the same time to ensure that the line was eventually built, they obtained consent to vest control of the line in their joint ownership, and clauses to this effect were inserted in the Bill then before Parliament. It was not passed until 1870, when construction commenced under the supervision of John Fraser of Leeds.

Halifax and Keighley line had not deterred the business interests of Halifax, who were anxious to see rail communication established between Huddersfield, Halifax and Keighley. They revived the scheme in 1867, this time anticipating support from the Midland. The latter did indeed back the scheme in the House of Commons, but then withdrew their support in the Lords owing to other commitments, and the Bill was defeated. In 1872, it was mooted again, but the Midland again declined support; in a letter dated October 29, 1872, the Midland Chairman regretted his company's inability to support this "Huddersfield, Halifax and Keighley Railway," and blandly invited its promotors to carry on alone. Undaunted, the local men thereupon deposited the requisite Parliamentary notices and approached the Great Northern for support, but the G.N.R. was prepared to link



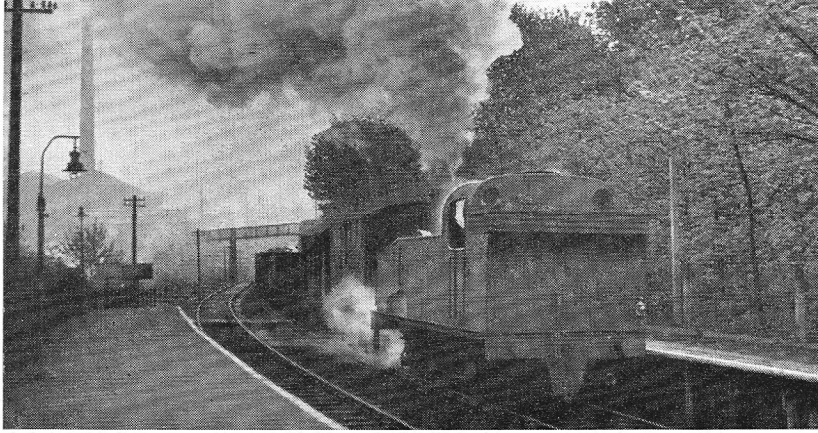
During 1870-1, the Great Northern committed itself to numerous extensions in the West Riding, including a line from Bradford to Thornton. Originally projected as a through route from Bradford to Keighley, but modified because of costly and difficult engineering works, this short branch was sponsored by the Foster family of Queensbury and Messrs. John Fraser and Henry Nelson of Leeds. Fraser and Nelson were well versed in the art of promoting independent lines in the West Riding, which they eventually "handed over" to the Great Northern, and a Bradford & Thornton Railway Bill was deposited in Parliament in 1870. Fearing that the Midland might ultimately acquire it, the Great Northern decided to take the line over, and obtained powers to do so in 1871.

Meanwhile, the virtual failure of the

Ovenden and Keighley only if the inhabitants of the locality would subscribe half the capital, and moreover they would not consider extension to Huddersfield. This proposal was not acceptable to the Huddersfield, Halifax and Keighley company, and negotiations fell through.

November, 1872, was well advanced when the discussions broke down, but the Huddersfield, Halifax and Keighley promoters would not be beaten. Before the month was out they deposited plans in Parliament for a line of their own from Ovenden to Keighley. Messrs. Ackroyd and Foster raised the cash and Nelson and Fraser had conveniently prepared plans for such an eventuality (Fraser was, in any case, well acquainted with the abortive plan of the Huddersfield, Halifax and Keighley scheme). The provisional committee of the

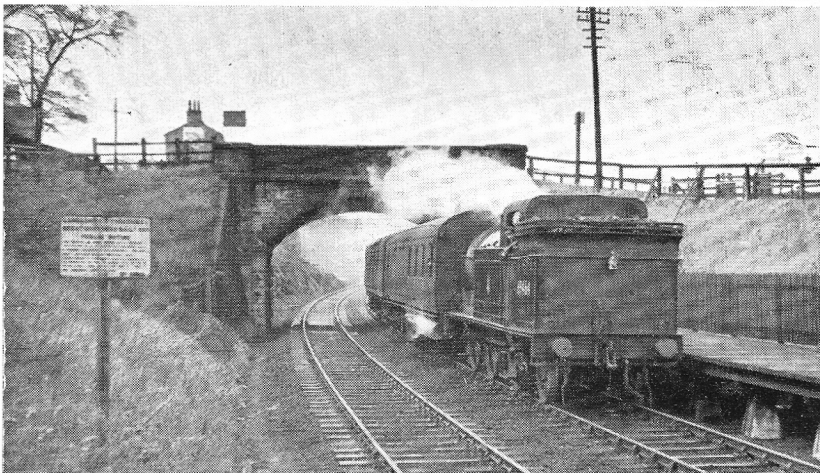
THE QUEENSBURY TRIANGLE



Right : Class "J50" 0-6-0T No. 68923 climbs noisily through Ovenden with a Halifax-Bradford freight on May 14, 1955. *[J. F. Oxley*

Right : The 4.18 p.m. Keighley-Bradford, headed by Class "N1" 0-6-2T No. 69434, calls at Wilsden on May 14, 1955. *[J. F. Oxley*

Left : A July, 1947 excursion calls at Holmfield on its return from Bridlington. Double-heading the train are Class "J6" 0-6-0 No. 4267 and Class "B6" 4-6-0 No. 1348.
[A. R. Wilson



Right : Halifax St. Paul's station on September 6, 1953, during the visit of an S.L.S.-M.L.S. railtour train headed by Class "N1" 0-6-2T No. 69430. *[J. P. Wilson*

Right : The 3.34 p.m. Bradford-Halifax, with Class "N1" 0-6-2T No. 69463 in charge, arrives at Ovenden on May 14, 1955. Note the G.N.-L. & Y. joint injunction against trespassing on the left of the picture.
[J. F. Oxley

46230

Thornton & Keighley Railway (as the line was now known) consisted of Ackroyd, Foster and Crossley. The latter had been the chief advocate of the Huddersfield and Keighley, but had thrown in his lot with the T. & K.R. when his own scheme finally fell through. Then, on December 23, 1872, the Great Northern offered to acquire the line on the same terms that it had taken over the Bradford and Thornton. The offer was accepted, and the Great Northern became responsible for further capital expenditure, totalling £640,000.

The new line was considered by Parliament in the spring of 1873. It was supported by numerous bodies but equally strongly opposed by the Midland, the L. & Y.R., the Keighley & Worth Valley Railway, and Bradford Corporation (which was concerned for the safety of its reservoirs at Doe Park and Manywells, close to the proposed railway). Although it was backing the Bill, the Halifax Chamber of Commerce would have preferred a Huddersfield-Halifax-Keighley line supported by the Midland ; when this view came by chance to the ears of the Midland, which was opposing the T. & K.R. scheme on the grounds that such a line was unnecessary, it promptly turned a somersault and publicly declared that it intended to promote an identical line at a later date !

When the Committee Stage of the Thornton & Keighley Bill was reached, the Midland renewed its pledge to promote a line if the Bill was defeated. Immediately, the President of the Chamber of Commerce, William Morris, summoned a meeting for Saturday, May 3, 1873, in Halifax Town Hall, to review the situation. The meeting was an exceedingly stormy one, and despite protests from Mr. Crossley, who felt that the Midland proposal was merely a subterfuge to block the Great Northern, the vote went in favour of the Midland ; accordingly the Mayor of Halifax, although listed as a supporter of the Thornton & Keighley Bill, gave evidence against it. Nevertheless, the Bill passed the Commons on May 12, 1873, and reached Committee Stage in the Lords on July 14 ; here the Midland were refused a "locus standi" to object, and the Bill passed the Upper House next day.

In the event, none of these lines were to be ready for a considerable time. The Halifax & Ovenden was opened for goods and minerals in the summer of 1874, and construction of the Bradford & Thornton and Halifax, Thornton & Keighley (as the T. & K. was now known) commenced at the same time under the supervision of Fraser. So little had been done by 1876 that an extension of time became necessary. The section from Bradford to Clayton was opened for goods and mineral traffic in midsummer, 1877, and a year later work on Queensbury Tunnel and Strines Cutting was well advanced, but construction on the Thornton-Keighley section had not begun.

By 1878, the capital expenditure account of the Great Northern was seriously overburdened. Extensions planned in the early 1870's—a time of national prosperity—were now being paid for in a period of depression. For a time a go-slow policy was enforced and only the most essential commitments were carried out. Headings for the four tunnels on the Thornton-Keighley line were put in hand, but all other work was indefinitely deferred. On October 14, 1878, the Bradford & Thornton reached Queensbury, but Ovenden was not reached until December 1, 1879. From that date the Great Northern began to work traffic from Bradford to Halifax over its own metals between Mill Junction and Ovenden.

In 1881, the Great Northern obtained Parliamentary sanction to reduce its liability for the Thornton-Keighley line by substituting a joint passenger station with the Midland at Keighley for a terminus of its own ; entry into Keighley itself was now to be made over the Keighley & Worth Valley line from Ingrow. Work on the Thornton-Keighley line was further delayed by exceptionally heavy engineering work, which will be referred to in detail later, and it was not until January 1, 1884, that the Thornton-Denholme section was opened to traffic. Opening throughout to Keighley took place on November 1, 1884, but the station at Keighley was not ready until the spring of 1885.

In 1884, a local company promoted a line from the Great Northern and Lancashire & Yorkshire at Holmfield to the King Cross district of Halifax. It was known as the Halifax High Level line, for it gave access to a hilly part of the town 325 ft. above the main station. A Bill to allow the G.N. and L. & Y. companies to work the line under a 3½ per cent dividend guarantee was promoted in 1886, but its progress was delayed by the dissolution of Parliament. The line was opened to a terminus at St. Paul's, Station, Halifax, on September 5, 1890, and four years later the G.N. and L. & Y. purchased it outright. With the opening of the Halifax High Level the system of railway communication centred on Queensbury was completed.

Although the triangular junction at Queensbury is fairly well known, it is not generally realised that the lines commence at Bradford with a similar layout. St. Dunstan's station, situated ½ mile south of Bradford Exchange, has two sets of platforms—one for the Leeds branch and the

Facing page : Pacific No. 46230 *Duchess of Buccleuch* glints in the September sun as she forges up Beattock bank with the 10.10 a.m. Euston-Glasgow.
[*W. J. V. Anderson*

other set for Queensbury trains. The third side of the triangle has never carried a regular passenger service, but is used extensively for freight and excursion traffic. No satisfactory explanation exists for the name given to the station, which was closed to traffic on September 15, 1952. Bearing sharply to the west, the branch passes under the L. & Y. Manchester line, then threads a short tunnel and, still climbing steeply at 1 in 50-60-45, enters Manchester Road station, closed in 1926. After plunging into another short tunnel, the line emerges at Horton Park, where it makes a junction with the double-track City Road Goods depot branch, leading off to the right. Horton Park station itself serves Park Avenue cricket and football grounds, and, although closed to ordinary traffic on the same day as St. Dunstan's, is still used occasionally for football excursions.

At the next station, Great Horton, there is a heavy parcels and freight traffic, the former requiring several parcels trains a day. The station buildings are of uninteresting design, and, like those of all other stations on the branch, have not been painted for many years. Between Great Horton and Clayton (3½ miles from Bradford Exchange) the line passes through a deep cutting and crosses a high embankment affording a pleasant view of the terrain through which the line was constructed. Clayton station is an island platform structure, conveniently situated in the township of the same name, which at one time handled an extensive local traffic that now goes by road. Beyond the station, the line enters another tunnel and emerges into a narrow gulley, soon reaching Queensbury, 4¾ miles from Bradford.

Queensbury Station abounds in unusual features. Platforms line all three sides of the triangular junction, and there are buildings on each, although the main offices are located on a footbridge at the Bradford end of the station. The platforms themselves are mostly of wood, but those on the Bradford-Keighley side are carried on a stone viaduct; they are connected to the Keighley-Halifax platforms by a sleeper crossing, while in turn the Bradford-Halifax platforms are reached by a primitive subway. The layout was constructed on an escarpment which has been partly filled in with rubble and stone. Formerly the junction was controlled by three signalboxes —East, North and South, but now East box controls all three legs of the triangle. Two short sidings for goods traffic complete the picture. Queensbury township stands 980 ft. above sea level at the top of the hill which overlooks the station.

Leaving Queensbury South junction, the Halifax line enters Queensbury Tunnel, 1 mile 741 yds. in length, and the second longest tunnel on the Great Northern. At the time of construction difficulties were encountered with water-bearing strata, but these were more speedily resolved than similar troubles in Strines Cutting, which lies at the south end of the tunnel and is 1,033 yds. long, 59 ft. deep and hewn out of solid rock. The line is now falling at 1 in 80 and soon enters Holmfield. This station—the original Ovenden—is the junction for the Halifax High Level line ; there are two platforms and a bay once used by local trains to St. Pauls. The Great Northern had a shed at the rear of the station, but it was closed many years ago. Continuing along the valley floor, the line, now joint with the L. & Y., to Halifax (Old) reaches Ovenden Station, 7¾ miles from Bradford. The station buildings are mostly of timber, but the layout is simpler than at other stations and there are no facilities for handling freight traffic.

The difficult nature of the area through which all Great Northern lines in the West Riding were constructed can best be appreciated as the line enters Halifax. Rows of stone houses are perched dizzily on the slopes of the steep hills which encircle the town centre, and soon the line, still falling sharply, passes through a short tunnel and enters North Bridge Station, another island-structure with buildings at street level. North Bridge itself spans the shallow valley through which the railway is laid. There is a large goods yard on the right as the branch reaches Halifax (Old) Station, 9¾ miles from Bradford. Formerly under the jurisdiction of the L. & Y. and G.N. Joint Stations Committee, it was renamed Halifax Town in 1951 and like all lines in the district is now incorporated in the North Eastern Region.

The High Level line leaves Holmfield Station and swings to the right. It was originally double track throughout but was singled many years ago and is now worked on the one-engine-in-steam principle. Climbing steadily the line enters Wheatley tunnel, crosses a fine viaduct and enters Pellon Station, an island platform structure from which all buildings have been removed (Passenger services on the High Level line were withdrawn as long ago as January 1, 1917). Half-a-mile further on is the terminus at Halifax St. Paul's, 3½ miles from Holmfield. There are two platform roads here, with offices at the terminal end.

From Queensbury North Junction the third projection of the triangle, the Thornton & Keighley line, describes an S-bend and crosses Thornton Viaduct, a massive structure of brick and stone. Turning sharply westwards it comes upon Thornton, another typical Great Northern island-platform station. A short distance beyond the station, a long private siding, now derelict, leads off

to the left and terminates at a mill near Four Lane Ends. There are two tunnels between Thornton and Denholme, the next station, the most important being Well Head ; the other is of little consequence, except that the retaining walls at its northern end gave much trouble during construction. Denholme, a typical West Riding woollen township, lies some distance from the station, which overlooks Doe Park Reservoir. Two more short tunnels, several embankments and cuttings are encountered before Wilsden Station, 8¾ miles from Bradford. Now comes a most impressive engineering work, Hewenden Viaduct, 376 yds. long with a maximum height of 123 ft. There are seventeen brick arches of 50-ft. span, and the stone piers were sunk to a depth of no less than 62½ ft., owing to the close proximity of Manywells Reservoir. From Denholme to Keighley the gradient falls at an average of 1 in 50, with stretches at 1 in 45. Cullingworth Viaduct, 150 yds. long and 45 ft. high, overlooks the village, which has a two-platform station. At the entrance to Lees Moor Tunnel, ⅞-mile long, the line heads west but emerges high above the floor of Worth Valley and runs northwards to Ingrow. The Keighley and Worth Valley branch can be seen at a lower level. Ingrow Station requires no comment, but a short distance farther on one notices the remains of the Great Northern locomotive shed on the left.

At Keighley G.N. Junction, the Worth Valley branch is joined for the run into Keighley. The line to the Great Northern goods station continues alongside the Worth Valley for a short distance before burrowing under it just outside Keighley Station. A short connection between the G.N. and the Worth Valley is used to enable passenger trains to enter the joint station and it is this single-track connection which has given rise to an oft-quoted and erroneous impression, that the section from G.N. Junction to the terminus is worked as two single lines. Keighley station itself, 13½ miles from Bradford via Queensbury, is a typical Midland structure located on a sharp curve. There are four platforms, two for the Midland main line services and two for the Worth Valley and Keighley trains.

The opening of railways in the Queensbury district attracted a very heavy local passenger traffic which reached its peak at the turn of the century, before electric tramways made serious inroads into it. Taking Holmfield station as a typical example, the Station Cash Revenue Book for 1892-95, now in the authors' possession, shows that 1,143½ passengers were booked on Saturday, January 2, 1892 ; receipts totalled £10 15s 1½d, giving an average fare per passenger of 2¼d ! During August, 1895, 19,354 passengers were booked, the receipts amounting to £253 9s 7½d. Of this grand total of 19,354 passengers, 3,929½ travelled to or via Queensbury, 10,628½ used the joint line into Halifax and 4,796 booked to Pellon or Halifax St. Pauls. These figures probably represent the high-water mark for passenger receipts on the line, for tramway competition quickly captured the very short distance traffic. The introduction of bus services linking Bradford, Halifax and other centres in the 1920's accelerated the process, and eventually caused a reduction in services. Sunday trains were withdrawn in December, 1938, but the outbreak of war temporarily halted the decline. On the Halifax High Level line, passenger traffic was always light and, as already mentioned, services were withdrawn as early as 1917, although excursions continued to run from Halifax St. Paul's on occasion until 1939.

In 1946, there were 24 trains each weekday between Bradford and Halifax or Keighley, 19 between Halifax and Bradford or Keighley, and 18 between Keighley and Bradford or Halifax. Almost all trains connected with one another at Queensbury and, being evenly spaced throughout the day, offered an unusually ample service. One train in each direction conveyed a through coach from Halifax to King's Cross, covering the 9¾ miles to Bradford non-stop in 22 minutes, but other trains usually stopped at every station. In 1950 the service was completely recast, giving a slightly better service between Bradford and Halifax or Keighley at peak periods but virtually cutting out the Halifax-Keighley through trains, and eliminating altogether the mid-morning and evening service. By now, however, passenger traffic was at a very low ebb indeed and a survey by the North Eastern Region in 1953/54 showed that a saving of not less than £48,000 a year would be gained if passenger services were withdrawn.

Accordingly, normal services were withdrawn from all stations on the section from Monday, May 23, 1955. Excursion facilities were retained at all stations, however, and a fairly extensive programme was in operation during the summer months of 1955 ; with careful planning, therefore, it remains possible to travel on all the lines radiating from Queensbury, excepting the High Level line, which now handles freight traffic only.

Since the withdrawal of passenger services freight workings have been reorganised to enable the line to close during the night, whereas formerly it was open continuously, weekends excepted. Freight traffic is still quite brisk and demands a fairly frequent service, but the capacity of the line is nowhere fully extended.

As might be expected on such a severely graded line, locomotives on the Queensbury

section are worked extremely hard. In particular, the start from Bradford severely handicaps freight working, for a series of reverse curves on the St. Dunstan's avoiding line gives the locomotive no chance to rush the bank. Moreover, Manchester Road tunnel is particularly wet, and belching smoke does not help matters By the time trains reach the cutting beyond Great Horton, the sound from the exhaust sets up an echo which can be heard on all sides of the valley even on a stifling hot day. At several places on the down grades, brakes must be pinned down and there are exacting load restrictions over the whole line. At the time of withdrawal, and for some years beforehand, passenger trains—usually of two- or three-coach formations—were the exclusive preserve of the "N1" class 0-6-2 tanks. Earlier still, the "C12" 4-4-2 tanks held sway for many years and only excursion workings normally brought other passenger engines on to the line. On Sunday, September 6, 1953, an S.L.S./M.L.S. Special hauled by the prototype "N1," No. 69430, traversed the St. Dunstan's-Holmfield section, continuing up the Halifax High Level line to St. Pauls.

On freight traffic, the "J6," "J39" and "J50" classes predominate, although "J52s" and "B1s" appear occasionally. In recent months L.M.R. "4F" 0-6-0s have undergone trials on the Keighley-Bradford route with a view to diverting freight traffic from the North to the line. Use has also been made of the line to train motormen in connection with the multiple-unit diesel train services based on Bradford.

In conclusion, the authors wish to express their thanks to Messrs. J. C. W. Halliday and J. P. Wilson for their assistance in the compilation of this article.

Wainwright's "D's" leave the S.E.C.R.

By R. A. H. WEIGHT

DURING the winter of 1955-6 a considerable reallocation and re-rostering of engines took place on the Southern Region, affecting particularly the Eastern Section. For the first time for more than 75 years there are no unrebuilt or unsuperheated 4-4-0s stationed at former S.E.C.R. sheds, where they had predominated before and after the 1899 fusion of the London, Chatham & Dover and South Eastern companies' stocks, and until after the 1923 grouping. The few unrebuilt "D" 4-4-0s of Wainwright's design are spending their last days at Guildford depot, which was the property of the L.S.W.R., and now work over parts of the Western and Central Sections of the S.R.

Again, probably for the first time in about 75 years, no two-cylinder or pre-grouping 4-4-0s are stationed at Hastings shed (now St. Leonards). The latter's augmented stud of 13 three-cylinder "Schools" 4-4-0s, with others of the same type from Bricklayers' Arms shed, as well as running the fast London trains now deal with all-stations or local services, consisting often of three coaches weighing less than the engine and tender, in the Tonbridge-Hastings-Ashford area. Instead of the rostered "L" superheated 4-4-0, a Ramsgate "Schools" sometimes appears on a slow Ramsgate-Ashford-Hastings-Tonbridge-Redhill-Ramsgate diagram, an arrangement typical of the present addiction to concentrated duties with short margins, in some cases involving changes of crews from one footplate to another and sometimes between strangely contrasted types of locomotive. A good example of alternation between large and small locomotives is the duty of the St. Leonards top link men who take the Bricklayers' Arms "Schools" arriving at Hastings on the 5.45 a.m. slow from London straight away on to an Ashford-Tonbridge (turn)-Hastings-Ashford tour, then work back to Hastings with an "H" 0-4-4 tank. On another duty they start by working up from St. Leonards to Tonbridge with a Faversham engine, usually an "L" class 4-4-0, engaged on one of the two-day rounds, and in this case visiting Ramsgate, Ashford, Hastings, Tonbridge and Edenbridge; then they board one of their "Schools" at Tonbridge on the 5.29 p.m. from Charing Cross; from Hastings they go on at once with the 7.38 slow to Ashford, whence they soon return to Hastings on an L.M.S.-type 2-6-4 tank stationed at Ramsgate.

The new engine rosters enable more extended journeys to be made and reduce turning and shed-time. Examples of the itineraries now diagrammed are: Redhill-Tonbridge, Tonbridge-Ashford via main line and beyond; Tonbridge-Hastings-Ashford-Tonbridge or Maidstone East; Eastbourne or Brighton-Tunbridge Wells-Tonbridge-Redhill; and Ashford-Ramsgate (via Dover or Canterbury West)-Faversham. Maunsell "L1" 4-4-0s participate in some of these duties with "L" and rebuilt S.E.C. Wainwright 4-4-0s, with L.M.S. or B.R.-type 2-6-4 tanks, L.M.-type 2-6-2 tanks, and also regularly a few of the veteran "H" Wainwright 0-4-4 tanks. Given a chance under favourable conditions, the old-stager rebuilt "E1" and "D1" 4-4-0s can still put up some lively short-range uphill and downhill performances.

★ S.R. Class " E4 " 0-6-2T No 32582 takes the East Grinstead line at Groombridge Junction with a Tunbridge Wells West-Three Bridges train on October 3, 1953 [*S. Creer*

★ Class " D16 " 4-4-0 No 62609 heads a Yarmouth-Peterborough-Rugby express through an arch of Lakenham viaduct, carrying the Ipswich-Haughley-Norwich main line over the Norwich-Thetford route near Trowse, on July 23, 1955. [*R. E. Vincent*

HOPE VALLEY PASSENGER

Fireworks on the Midland

ON Sunday, April 15, 1956, the down line of the Midland Division, L.M.R., between mileposts 14¾ and 15½ on the section connecting Tamworth and Burton-on-Trent, was the *venue* of a highly unusual test, for a train was run at high speed over 200 detonators in rapid succession ! The arrangements were that the test should be carried out shortly after the passing of the 10 a.m. express from Birmingham to Leeds. This was due through nearby Wichnor at 10.39 a.m. and the test train was timed to leave Burton in the south-bound direction at 10.50, its driver being briefed to attain a speed as near 80 m.p.h. as he could.

To reach the site, I caught a diesel train to Lichfield. From Lichfield I walked on to Barton, where my 1 in. Ordnance map showed a farm lane obviously convenient for witnessing a unique spectacle. I soon noticed that all cattle had been gathered into their stalls ; the railway Estates Department at Derby, in touch periodically with all lineside landowners, had warned farmers to do this.

My timing was excellent. Hardly had I got into place when there arose a roar in the distance and the train came rushing towards the level crossing where I stood. Several hundred yards away, just outside Barton Station, it hit the detonators. Immediately the air was rent with what sounded like a burst of mighty automatic fire. A cloud of smoke formed behind the engine, and with that as background flashes could be seen even in the sunlight of a perfect April morning. Running well—but, it seemed to me, at something less than 80—there tore by the crossing standard 4-6-0 No. 73054 and five coaches.

As soon as she had passed, about a score of permanent way staff set out from the fences with small canvas bags to gather up the remains and note the fragmentation. This, I understand, was the purpose of the test. There has always been an element of danger in the use of detonators and this was a trial of prototypes of safer designs. **O. H. PROSSER.**

Above left : A Manchester-Sheffield stopping train via the attractively scenic Midland route through the Hope Valley leaves Chinley on July 16, 1955, double-headed by Class "3" 2-6-2T No. 40082 and compound 4-4-0 No. 40927. [*R. D. Pollard*

Below : Early morning in the Hope Valley. "Jubilee" 4-6-0 No 45725 *Repulse* coasts into Bamford station (facing page) with the 6.5 a.m. Manchester (Central)-Sheffield on September 28, 1935 and finds business reasonably brisk (below). [*R. E. Vincent*

Mile-a-minute on the L.M.R.

by CECIL J. ALLEN
M.Inst.T., A.I.Loco.E.

RECENTLY I have received a reminiscent letter from a reader in the United States, Mr. Frederick W. Wimbush, which is of such interest that it is worth quotation at length. While at the age of 76 his sight is nearly gone, he is still able to type, and from what he writes about a life of the most amazing variety it is clear that there is nothing wrong with his memory. His working life began on the Great Western Railway at the age of 13 with locomotve cleaning, and it is in the locomotive conditions of these early years that the interest of the letter lies.

" On starting to fire," the letter begins, " I was detailed to a driver at Stourbridge, who wouldn't let me do a thing unless he ordered it. I was to ' put a bit of coal here,' ' a bit there,' ' give her half-an-inch of water,' ' put the brake on,' ' take it off,' and so on—always under instructions. He was a Cornishman, and loved to tell me that he wasn't English but a descendant of the ancient Britons. So I read up a bit on the subject, and one day had the courage to tell him, ' Yes, but the Romans, the Danes, the French and a few other countries ran you back into the mountains of Wales and Cornwall, and you never dare come out again until the English civilised things a bit for you.' Was he mad ! I thought he was going to kill me right off, and I was so frightened that I daren't walk home with him that day !

" Well, I was with this driver for a couple of months, and then had to go sick to get away from him. Then I got a note from the Locomotive Foreman to go and see him, which I did. I told him that I intended to quit unless he could find me a change of drivers ; I had entered the service with the intention of becoming a driver some day, but with this man I should never learn a thing, for he wouldn't answer any questions that I asked him, or looked dumb as if he didn't know. It turned out that during my absence this driver had had five firemen in five days, all of whom had refused to go out with him again. In the end they got rid of him.

" Next I was sent to Southall. It was supposed to be a promotion, but there was so much time off that I had to keep going to the South Kensington Museum, and also round to the stations to see the engines of other companies. I hadn't been long at Southall when one Sunday morning as we were booking off I heard the shed foreman and a fireman in a big argument. I asked my driver what it was all about, and he told me that there was a train out at about 10.40 at night which picked up fish and mail at Didcot and then was next stop Birmingham, where the crew had to lay off for 23 hours, and that was what they didn't like. So I told him I was going back to see if I could get it as it would suit me fine ; I had a girl in Stourbridge whom I could go and see. The foreman wouldn't promise me anything for certain, but told me that if he couldn't get anyone else to go he would send for me—and he did !

" The old driver with whom we lodged at Bordesley started to kid my driver by asking him where he had got ' that boy ' for a fireman ; and my driver laughed and said, ' Why, what d'you think he did to me—waited until we were out on the train and then told me he didn't know how to fire as he had been ruined by a previous driver, and it was his first long run with only one stop.' However, he added that he had had plenty of steam and was going to ask to keep me when he got back ; and that pleased me a lot.

" I did that 10.40 job every Sunday night for nearly a year and we had some exciting trips. One night we picked up at Didcot five vans with fish and mail, and twenty ' empties '—or so they were supposed to be. We hadn't gone far when my driver said ' They're pulling heavy tonight ' ; and I replied ' Yes, I've found that out already. Can't you hear we've had both injectors on almost all the time ? ' Just as we were getting near Banbury both injectors blew off, and I found the tender tank was all but dry, and we were going to be short of coal too. Well, we just managed to get to Leamington with a speck of water still bobbing up and down at the bottom of the glass, and while we were taking water and coal my driver went back to have a look at the supposed ' empties.' Each one had about ten tons of pig iron in it !

" One curse of footplate work in those old Great Western days was the coal bonus. Some drivers for whom I have fired haven't been content merely to let me wet the coal, but have come across themselves and simply drowned it with the hose ; as a result we have got the tubes all clinkered up ; however, sometimes I

have got my own back when the driver was off the engine for a few minutes by turning the hose on to the tube-plate. It may not have done the tube-plate much good, but it got the clinker off all right ! Out of the eight different drivers for whom I fired, no two worked their engines in the same way ; all of them seemed frightened to open the regulator more than half-way, or to widen the cut-off to more than about four notches. It always seemed a pity to me that locomotive designers never put out printed instructions as to how their engines were supposed to be worked, as many of the drivers had only the vaguest ideas about it.

" Many of the old G.W.R. tender goods engines had a blastpipe with a pull-over nozzle to make the top smaller ; if you asked a driver what this was for, he would say, ' Oh, you pull the nozzle over if you're short of steam,' but I never saw a driver use it. I used to ask the question just to start an argument, for I knew that no driver would use the smaller nozzle in case the engine should burn more coal that way, for that would affect his bonus. One day one of my drivers wanted me to get up on to a coal wagon that was alongside the engine, and throw some of the lumps on to our tender, but I told him I didn't intend to be fired and go to gaol for the sake of his coal bonus ! Another day there was a lot of coal lying round the coal stage and my driver, seeing it, grabbed the shovel and got it into three nice little heaps ready to be shovelled on to our tender. But while he was busy getting the engine ready, another driver nipped in and picked it all up ! My, you should have heard the language ! " Much more could be quoted from this most entertaining letter, but my correspondent later turned to the roads, and became a chauffeur, which he found much more profitable, and also much more exciting, as his work took him all over Europe.

We turn now to some locomotive performance of the present day. One of the most entertaining round trips that the recorder of locomotive performance can make to and from London, in the compass of a reasonably short distance and time and with mile-a-minute runs in both directions, is by the London Midland Region 1.30 p.m. " Midday Scot " from Euston to Rugby, 82.6 miles in 80 min., and then returning by the 3.15 p.m. from Rugby in 79 min. If the " Midday Scot " is on time, there is a comfortable 25 min. at Rugby in which to make the connection with the 2.30 p.m. from Birmingham, on which some very fast running almost invariably is performed. The latter is a happy hunting ground of the main line diesels, and a performance of the most powerful of them, the 2,000 h.p. Southern No. 10203, figures in the annexed Table 1, with one coach over the normal 10-coach load. Compared with this are runs with a rebuilt " Royal Scot " and ten coaches, and with a " Jubilee " 4-6-0 and eleven, and finally with a rebuilt " Patriot " and twelve. The run in the first column was timed by Mr. T. R. Pearson, that in the second jointly by Mr. K. R. Phillips and Mr. R. Townsin, that in the third by Mr. Townsin alone, and that in the fourth by Mr. Phillips and Mr. B. J. Howell.

In view of the gradual climb from Rugby start to Kilsby tunnel, the initial 13 min. allowance for the 12.9 miles to Welton calls for an acceleration of practically impossible rapidity, and at least 2 min. usually is dropped over this stage ; the diesel got nearer to the 13 min. than any other starting time of which I have a record, with 13 min. 32 sec. The easiest part of the schedule is the 15 min. allowed over the 15.0 miles from Bletchley up to Tring, and here a gain of 2 min. is no difficult matter. With a clear road, a driver can therefore expect to pass Tring on time, and the rest is relatively easy. It will be noted that the passing time at Watford—60 min. from Rugby—is equal to the 60 min. start to stop allowed the 6.20 p.m. from Birmingham to Euston before the war, and that on all three runs the locomotives concerned could have stopped in Watford in less than the hour, and, moreover, with a considerably heavier load than the pre-war 6.20 p.m. ever carried.

From time to time a " Royal Scot " appears on this train, though not frequently. This was the case on the first run, when the train was headed by No. 46136, an engine from the Upperby shed at Carlisle. The start of this run was leisurely, but by covering the 69.9 miles from Welton to Willesden in 57 min. 28 sec. (73.0 m.p.h. average for the whole distance), the driver beat his schedule over this length by 5¼ min., and arrived 1 min. early notwithstanding the final signal checks.

The run of *Leinster* in the second column was one of the finest that I have ever known with a " Jubilee " hauling a load of this magnitude. With 385 tons of train as compared with 355 tons, the smaller engine beat the times of the " Royal Scot " by 21 sec. to Welton and Weedon, but had fallen a corresponding amount behind by Bletchley. After that it was a neck-and-neck to Berkhamsted, and then *Leinster* began to draw ahead again, just bettering the " Royal Scot's " time to Willesden. From Welton to Willesden on this run took 57 min. 42 sec. (72.7 m.p.h.), and with a fast run into the terminus the " Jubilee," which had left Rugby 6 min. late, came to a stand in Euston only 1¾ min. late, having

TABLE I

L.M.R. RUGBY-EUSTON

Dist.	*Locomotive No.* *Load, Coaches* *Load, tons tare* *Load, tons gross*	*Schedule*	46136 10 332 355		† 45741 11 361 385		‡ 10203 11 354 380		§ 45512 12 402 435	
miles		*min.*	*m. s.*	*m.p.h.*	*m. s.*	*m.p.h.*	*m. s.*	*m.p.h.*	*m. s.*	*m.p.h.*
0.0	RUGBY	0	0 00	—	0 00	—	0 00	—	0 00	—
2.3	*Hillmorton*	—	4 40	40	4 24	41	4 12	50	4 37	45
7.3	Welton	—	10 38	61½	10 17	62½	9 15	70	10 14	65
12.9	Weedon	13	15 20	78	14 59	76	13 32	81	14 42	80
19.8	BLISWORTH ...	19	20 55	70½	20 43	67	18 48	74	23 02	66½
22.7	ROADE	22	23 28	66	23 27	62½	21 12	72	25 42	65
27.8	Castlethorpe ...	—	27 35	79½	27 41	78	25 06	82½	29 41	82½
30.2	Wolverton ...	—	29 24	75/70	29 37	71/69	26 53	80	31 27	79/72
							sigs.	34		
35.9	BLETCHLEY ...	33	34 04	73	34 28	70½	33 08	—	36 07	73
42.4	Leighton Buzzard ...	—	39 30	70	39 58	71½	39 57	68½/69½	41 39	67½
46.4	Cheddington ...	—	43 04	67½	43 29	67½	43 31	68	45 20	63
50.9	TRING	48	47 12	60½	47 36	61½	47 31	65	49 45	58
54.6	Berkhamsted ...	—	50 25	76	50 57	74½	50 41	78½	53 13	71½
58.1	Hemel Hempstead	—	53 07	79	53 36	81½	53 13	82½	56 07	74/68
61.7	King Langley ...	—	55 45	83½	56 13	82½	55 44	85½	59 05	76
65.2	WATFORD JUNC.	60	58 27	76/72	58 49	78½/74	58 23	76½/70½	61 51	75/71
69.3	Hatch End	—	61 45	75	62 05	76½	62 06	—	65 13	73
							p.w.s.	26		
71.2	Harrow	—	63 16	76	63 33	79	65 41	52	66 44	77
74.5	Wembley	—	65 54	77	65 59	82½	68 54	73½	69 12	82
77.2	WILLESDEN JUNC.	71	68 06	70	67 59	79	71 07	70	71 12	76
79.6	Kilburn	—	sigs.	—	69 54	71	73 22	63½	sigs.	—
81.5	Camden No. 1 ...	—	73 07	—	72 09	—	75 55	—	75 55	—
			sigs.	—		—			sigs.	—
82.6	EUSTON	79	78 08	—	74 48	—	78 18	—	79 32	—
82.6	Net times (min.) ...	79	74¾	—	74¾	—	71¾	—	75¼	—

* Class "7" ("Royal Scot") 4-6-0 *The Border Regiment*. † Class "6" ("Jubilee") 4-6-0 *Leinster*.
‡ 1-C-C-1 diesel-electric locomotive. § Class "7" Rebuilt "Patriot" 4-6-0 *Bunsen*.

taken no more than 74 min. 48 sec. for the 82.6 miles start to stop. I wish I were able to give the names of the engine crew responsible for this very fine performance; the engine itself is stationed at Bushbury.

Clearly the performance of the diesel was well ahead of that of either of its competitors. Every part of this run was outstanding;—the acceleration that produced 50 m.p.h. as soon as Hillmorton, the minima of 72 m.p.h. and 65 m.p.h. at Roade and Tring summits respectively, and the maxima of 82½ m.p.h. at Castlethorpe and 85½ at Kings Langley, all higher than the corresponding speeds on the other runs. The two signal checks between Wolverton and Bletchley cost 3 min., and that at Hatch End about 3½ min., leaving the net time for the run 71¾ min., which represents a start-to-stop average of 69.1 m.p.h. As I well know from my own footplate experience with her between Waterloo and Exeter, No. 10203 is a most capable machine, and the most competent of all the five main line diesels at present in service on British Railways. What the capacity of the "Deltic" is likely to be it is difficult to say, as her appearances until now have been few and uncertain.

A twelve-coach load of 435 tons gross is a very substantial test, even for a rebuilt "Patriot," but the crew of *Bunsen* kept time notwithstanding a bad permanent way check after Weedon, entailing a slow-down from an 80 m.p.h. maximum, and slight signal checks after Willesden, which was passed on time. The acceleration from the check to 66½ m.p.h. at Blisworth was excellent, as also the sustained high speed from Castlethorpe onwards; after a 58 m.p.h. minimum over Tring there was a sudden reduction from 74 to 68 m.p.h. after Hemel Hempsted—possibly the sighting of a "distant" at caution—but speed soon rose again, and finally reached 82 m.p.h. at Wembley. Thus the average net time of these four runs over the 82.6 miles from Rugby to Euston, with an average load of 390 gross tons, was 74 min. start to stop—an excellent showing for Class "6" and Class "7" locomotives.

And now for a run in the opposite direction by the "Midday Scot." When this train first assumed its "XL Limit" timing, the load, except at week-ends, was mostly about ten or eleven bogies out of Euston, but now frequently mounts to something considerably more than this, and on the run which appears in Table II, recorded by a correspondent who unfortunately omitted to note his name on his log, was of no less than sixteen vehicles, of 523 tare tons—13 tons over the maximum for a Class "8" engine on this timing, and 550 tons in gross weight. Not a few drivers would have demanded a pilot in such

conditions, and without it would not have attempted to keep time, but not so Driver H. Nicklin, one of the enginemen with the highest reputation for timekeeping at Crewe North shed. Notwithstanding a severe check on each of the two stages of the run, he more than kept time.

With any really heavy load, a timing of 80 min. over the 82.6 miles from Euston to Rugby, including the steep climb from a cold start up Camden bank and the long grind up to Tring, is most exacting. In my judgment, the allowance from Euston to Willesden ought to be 10 min. and to Watford 23 min., instead of 9 and 21 min. respectively ; all subsequent times should then be 2 min. later to Rugby, making 82 min. to that point. Again, out of Rugby 15 min. is a completely impossible time for the 14.6 miles to passing Nuneaton, whereas 13 min. for the 12.9 downhill miles to Tamworth—a relic of the years when there was a lengthy pitfall slowing beyond Polesworth, long since done away with—is from 2 to 3 min. longer than necessary. A more equitable distribution of the two times than the present 80 min. for the 82.6 miles to Rugby, and 77 min. for the 75.5 miles on to Crewe thus would be 82 and 75 min respectively, and this rearrangement incidentally would, if extended also to the " Royal Scot ", add two more mile-a-minute runs to the L.M.R. list.

So it was that the Class " 8 " Pacific No. 46224 *Princess Alexandra*, under Nicklin's expert handling, though dropping 2 min. out to Watford—and that despite a speed rising from 56 to 60 m.p.h. up the 1 in 339 from Wembley to Carpenders Park—from Watford began steadily to regain time. Up the 1 in 335 from Kings Langley speed was maintained steadily at from 67 to 65½ m.p.h., and then came 84 beyond Cheddington, before the 32 m.p.h. permanent way slowing at Stoke Hammond. From Bletchley onwards the running was some of the finest I have ever known over the L.M.R. main line with a load of this magnitude ; mark the 71½ m.p.h. minimum at Roade summit, and 75 minimum up to Kilsby tunnel, and the even more notable 84 m.p.h. on practically level track at Weedon. Over the 27.9 miles from Wolverton to Hillmorton the time of 21 min. 32 sec. entailed an average of 77.7 m.p.h., and by this magnificent turn of speed Nicklin brought his train into Rugby on time, having recovered 3¾ min. on this " XL Limit " schedule from Roade alone.

A most exceptional start was made also from Rugby, Nuneaton being passed in no more than 48 sec. over the 15 min. allowance from Rugby—again well-nigh a record with this load—at 84½ m.p.h. From here on the progress was very slightly easier, and after gaining 3 min. to Lichfield, Nicklin was content to gain time at a slightly lower rate, though still maintaining over a mile-a-minute up most of the rise from Stafford to Whitmore, which was passed 4¾ min. early. But this was to get some time in hand for the permanent way slack beyond Madeley, which spoiled the descent to Crewe. Nevertheless, the train stopped in Crewe platform 2 min. early, in 74 min. 57 sec. for the 75.5 miles from Rugby.

I make the net times about 76½ min. from Euston to Rugby, and 72½ min. from there to Crewe—a total of 149 min. instead of the 157 min. allowed. Had Rugby been passed at speed Crewe could have been reached in a net time of 147 min. or slightly less. Before the war the then 1.30 p.m. " Coronation Scot ", strictly limited in weight to nine bogies of 297 tare tons, was allowed 144 min. to pass Crewe, and

TABLE II

L.M.R. EUSTON-CREWE

Engine : 4-6-2 No. 46224 *Princess Alexandra*
Load : 16 coaches, 523 tons tare, 550 tons gross.

Dist.		*Sched.*	*Actual*	*Speeds*
mls.		*min.*	*m. s.*	*m.p.h.*
0.0	EUSTON	0	0 00	—
1.1	*Camden No. 1* ...	—	5 03	—
5.4	WILLESDEN JUNC.	9	10 58	57
8.1	Wembley	—	13 46	56
11.4	Harrow	—	17 12	59½
13.3	Hatch End	—	19 08	60
17.4	WATFORD JUNC.	21	23 06	68
20.9	Kings Langley ...	—	26 12	67
24.5	Hemel Hempsted ...	—	29 24	67
28.0	Berkhamsted ...	—	32 34	65½
31.7	TRING	35	35 56	—
36.1	Cheddington ...	—	39 08	84
40.2	Leighton Buzzard ...	—	42 28	75
			p.w.s.	*32
46.7	BLETCHLEY ...	47	49 23	47
52.4	Wolverton	—	55 06	75
54.8	Castlethorpe ...	—	57 01	74½
59.9	ROADE	58	61 16	71½
62.8	BLISWORTH ...	61	63 36	80½
69.7	Weedon	67	68 36	84
75.3	Welton	—	72 44	75
80.3	*Hillmorton*	—	76 38	81
82.6	RUGBY	80	79 38	—
5.5	Brinklow	—	8 14	63
8.8	Shilton	—	11 13	69½
10.9	Bulkington	—	13 05	74
14.5	NUNEATON ...	15	15 48	84½
19.7	Atherstone	—	19 41	75½
23.9	Polesworth	—	22 59	79
27.4	TAMWORTH ...	28	25 41	75
33.7	LICHFIELD	34	30 55	62
38.4	Armitage	—	35 16	—
41.7	RUGELEY	41	38 00	72½
44.6	Colwich	—	40 35	64
46.9	Milford	46	42 40	67
51.0	STAFFORD	51	46 56	*50
54.3	Great Bridgeford ...	—	50 40	56
56.3	NORTON BRIDGE	57	52 46	58
60.8	Standon Bridge ...	—	57 17	63
65.0	WHITMORE ...	66	61 21	61½
67.6	Madeley	—	63 45	66
			p.w.s.	*25
70.7	Betley Road ...	—	68 32	—
75.5	CREWE	77	74 57	—

* Speed restriction.
Net times, 76½ and 72½ min., total 149 min.
Schedule times, 80 and 77 min., total 157 min.

TABLE III
L.M.S.R. BLETCHLEY-EUSTON
Engine : 4-4-0 compound No. 1107*.
Load : 6 coaches, 185 tons tare, 195 tons gross.

Dist.		*Sched.*	*Actual*	*Speeds*
mls.		*min.*	*m. s.*	*m.p.h.*
0.0	BLETCHLEY ...	0	0 00	—
6.5	Leighton Buzzard ...	—	7 38	67/71
10.6	Cheddington ...	—	11 10	67
15.0	TRING	16	15 15	63
18.7	Berkhamsted ...	—	18 32	77
22.2	Hemel Hempsted ...	—	21 37	—
			p.w.s.	26
25.8	Kings Langley ...	—	26 43	67
29.3	WATFORD JUNC.	28	29 42	74/70
35.3	Harrow	—	34 44	77½
38.6	Wembley	—	37 17	80½
41.3	WILLESDEN JUNC.	38	39 18	75
46.7	EUSTON	46	45 55	—

* L.M.S.R. numbering.

Nicklin had come within 3 min. net of this time with a train of 523 tons—a most outstanding achievement.

I will conclude with details of a most entertaining little sprint by a Midland compound 4-4-0 over part of the same course, timed by Mr. D. S. M. Barrie. True, this run took place thirteen years ago, during the heyday period of London, Midland & Scottish speed, when the L.M.S. " On Time " campaign was at its zenith, and every possible point-to-point schedule that could be pared to bring it within the mile-a-minute orbit had been so treated. As a result, the modest 10.5 a.m. express from Northampton to Euston had had its time allowance over the 46.7 miles from Bletchley to Euston cut to 46 min. start to stop. The run concerned is set out in Table III.

It was a light load that No. 1107 had to tackle—no more than six bogies of 195 tons gross, but no lighter than some of the Midland Division express train formations of that period. The start from Bletchley, up gradually rising grades, was extremely fast, Leighton, 6.5 miles distant, being cleared in 7 min. 38 sec. at 67 m.p.h., and speed rising to 71 before Cheddington, while Tring summit, 15.0 miles, was passed in 15 min. 15 sec. at a minimum of 63 m.p.h. Then there was an acceleration to 77 m.p.h. in about 5 miles, after which there came a very bad permanent way slowing at Apsley. But speed was soon well up again, and finally just crossed the " 80 " line at Wembley ; with a very fast finish, Euston was reached in 45 min. 55 sec., or 43½ min. net—a very sprightly performance, which must, I imagine, have given the recorder no small stimulus !

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For the first time since the war a regular Sunday service will operate on the Cockermouth, Keswick & Penrith line this summer, we hear from Mr. A. J. Macbeath.

The Worth Valley branch

A KEIGHLEY correspondent, Mr. E. W. Booth, writes of the economies made on the Worth Valley branch from Keighley to Oxenhope in an effort to cut operating costs. When he travelled the branch in April he found that the only full-time " ground " staff on this single-line branch are the crossing keepers at Oakworth and Damens, who have been provided with new ground frames. The line is now operated with a staff and key from Keighley (G.N Junction), and tablets are no longer exchanged at Oakworth and Haworth ; the signalboxes have been closed, all signal arms removed beyond the Oakworth up distant and a number of little-used sidings have been taken out. The buildings and offices at intermediate stations have been closed and tickets are issued by the guard—or should he be styled " conductor " ?—from a portable self-printing machine as he walks through the centre-corridor stock now forming the trains. This worthy was busily engaged on the evening of Easter Monday, when our reader travelled in the new push-and-pull unit behind 2-6-2 tank No. 41327. On the up journey he had to hurry out of the train at Haworth to advise the Oakworth crossing keeper by telephone of the train's approach. He then had a bare three minutes after departure to issue fares to a large body of returning trippers from the Bronte parsonage at Haworth before rushing out to regather some of them from passengers leaving the train at Ingrow. The conductor himself doubles as a porter at Keighley on weekday mornings, when the push-and-pull unit withdraws to operate between Bradford (Forster Square) and Skipton, and the daily goods, usually hauled by 0-6-0 No. 43257, plods up and down the branch. At Keighley itself the south and west signalboxes are now normally closed, opening only when the bay or adjacent sidings come into use.

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It is interesting news that the Rock Island Railroad of the U.S.A., where bogie freight cars have been standard since the beginning of railroads, is turning to 35 ft. four-wheel wagons of reduced capacity so that it can quote lower rates for full carloads. The prototype four-wheelers are intended for container traffic, but the chassis will be adaptable for numerous types of freight wagon body.

EDITOR'S NOTE
We regret that owing to pressure on space we have been compelled to hold over until July the next bi-monthly Footplate Commentary by " Toram Beg ", also some book and record reviews.

LETTERS TO THE EDITOR

Memories of Crieff

SIR,—The article entitled "I remember Crieff" in the April issue was of special interest to me, as I am a native of Crieff and know the railway system very well. Mr. Stephen remarks that the McIntosh 0-4-4 tank would be the ideal engine for the branch. Actually, for over thirty years the Crieff lines were a stronghold of these engines, which incidentally were coaled by hand at Crieff. Three were for many years stationed here, their L.M.S. numbers being 15159, 15160 and 15168 (C.R. 439, 440 and 448). They were replaced by Pickersgill 4-4-0s at the beginning of the war, since, I understand, they no longer had adequate water and coal capacity, being worn out.

Mr. Stephen mentions various types seen at Crieff. In a matter of thirty years there I have seen over forty different classes mainly Caledonian, but including N.B., Midland, Highland, L.M.S. and L.N.E. types (the Midland representative was a Class "4" goods numbered in the "3800" series, with a Midland tender). During the war years the early morning mail train was regularly worked from Stirling by an L.N.E. Gresley 2-6-2 tank and I have also observed a Stanier 2-6-4 tank on this train. I think the three most unusual engines I have seen there were a Caledonian Pickersgill 4-6-2 tank (which was shedded at Stirling for a time), a Caledonian McIntosh Mogul and, strangest of all, a Great Northern Ivatt 4-4-0 on a ballast train in 1947.

During the years before the war the line was very busy during the summer months with scenic, evening and half-day excursions. These were usually handled by "Crab" 2-6-0s. I remember the first Sunday excursion from Dundee to Oban away back in 1934. This was worked from Perth to Balquhidder, where the train had to be reversed, prior to starting the difficult ascent of Glenogle. The only suitable engine the "Caley" had at Friarton sheds was that wonderful maid of all work, a Drummond "Jumbo" 0-6-0 (a class which never seemed to get any kudos but which has done and is still doing wonderful work). These engines are rated "2F." So many people turned up that extra coaches had to be added, so you can guess its driver was sweating when he saw a load of 12 coaches. He didn't know how he was going to get up Glenogle. A message was sent to Balquhidder, where another "Jumbo" was shedded. The driver and fireman were got out of their beds, raised steam and came down to Comrie, where they met the Oban train and then piloted it right through to Oban. Believe it or not, but the people concerned were "put on the carpet" for bringing out an engine without permission!

The following Sunday and all through the season the working from Perth to Oban was handed over to the Highland motive power department and the train was generally hauled by "Castles" or "Clans", which were ideal for the Oban line.

I have known the Crieff lines to take on a main line character several times. I can recall three occasions when, owing either to a derailment or to a bridge washed away, the line was blocked at Callander. All the Oban traffic came round by Balquhidder and Crieff to Gleneagles. One would have thought that the line to Balquhidder from Comrie would have been kept in case any such emergency arose again. Also I recall a bridge being renewed on the main line near Auchterarder. In consequence, all the traffic from Perth reversed at Crieff and then proceeded to Gleneagles to join the main line again. So Crieff saw a London train headed by a "Royal Scot."

I personally think it was a mistake to close the Perth instead of the Gleneagles line. Perth is a much handier place to change trains, especially for Edinburgh, Aberdeen, Inverness and Dundee. So far as Glasgow and the South are concerned, it would only mean a few miles extra on the journey. Certainly the bus route from Crieff to Perth is by far the busiest. Many Crieff people work in Perth, and many people go to the Royal Naval Stores at Almondbank, close to the station. British Railways have never made any attempt to capture this traffic.

Clifton, York. F. TURNER.

Boat train to Tyneside

SIR,—I was very interested to read about the diagramming of the Heaton Pacific that works the Tyne Commission Quay portion of the down "White Rose," as mentioned on page 185 of the April issue.

In February this year, while I was on a visit to the North-East, I took the opportunity of travelling on the boat portion from York. The load was a mere four carriages (142 tons tare), with "A2" No. 60539 (52B). The schedule allows 85 minutes for the 80.1 miles from York to Newcastle, but on the day in question the departure from York was 11½ minutes late. The run that followed was meteoric. From Beningbrough to Low Fell the only points where speed was below 70 m.p.h. were Darlington (passed on the through lines

at 53½ m.p.h.), milepost 50 (59½ m.p.h.) and Durham. Maximum speed was 79 m.p.h. before Birtley and the 80.1 miles were run in 77 min. 7 sec. inclusive of a signal stop for 4 min. 2 sec. on King Edward Bridge. At Newcastle Central "V1" 2-6-2 tank No. 67647, with two additional carriages, took over for the short run to Tyne Commission Quay, which involved running round at Percy Main North signalbox.

Longfield, Kent. A. G. S. DAVIES.

Midland Clerestories

SIR,—In your recent correspondence on Midland Clerestories, a certain vehicle has remained hitherto unmentioned; this is the TL M18841M. This vehicle, similar to its fellows in the 188XX series, was included in a Sundays only Bradford-Ilkley train on occasions through the summer of 1955, and was seen again on Manningham (Bradford) carriage sidings in late March of this year.

Ilkley. L. N. WOOLER.

The Somerset & Dorset 2-8-0s

SIR,—With reference to your excellent article on the Somerset and Dorset 2-8-0s, two of these engines, Nos. 53806/10, then L.M.S. Nos. 9676/80, were stationed at Toton in the late 1920's. A favourite turn of theirs was an up coal train passing through the platform road at Leicester shortly before 3 p.m. The engines returned to Bath in, I believe, June, 1931.

Ipswich. H. N. JAMES.

Discomfort in Ulster

SIR,—I realise that standards of passenger accommodation do vary in Ulster from those here. It should, however, be appreciated that it is only a matter of a few years since second class accommodation was abolished. This meant that much of the third class was automatically of a lower standard. It should also be noted that in Ulster bus fares are higher than train fares, therefore the bus traveller is presumably entitled to preferential treatment.

It takes a considerable time for any company to make an almost complete replacement of stock, such as faced the G.N.R. (I) after their bold decision to abolish second class. No Irish company has the capital required to make radical changes such as these, but for quite a number of years the G.N.R. has been introducing on its express services stock second to none in this country.

For a company in its circumstances the G.N.R. (I.) has every reason to be proud of its efforts. Its express trains are quite reasonably timed, its coaching stock is considerably cleaner than stock here and its magnificently finished blue engines are a sight for sore eyes.

As for the U.T.A., the white painting above the seats in compartments was done specially to brighten the stock, which was previously ornamented with the traditional L.M.S. photogravure pictures of resorts. Surely this is an improvement?

No, I feel that the Ulster stock has been condemned rather heavily. If only the savage and reckless closures of Ulster's railway system had been dealt with in the same way I would have been more inclined to agree.

Edinburgh 4. R. BELL.

Fireless Locomotives

SIR,—I was greatly interested in your article in the April issue on Bagnall fireless shunters. I feel, however, that the article rather tends to suggest that W. G. Bagnall Ltd. are the only firm who build this type of locomotive in this country, and this is not so.

The introduction of the fireless locomotive in this country was pioneered during the First World War by Messrs. Andrew Barclay Sons & Co., Ltd., of Caledonia Works, Kilmarnock, who built numbers of them for use in explosives factories, munition dumps, etc., where the fire risk with orthodox locomotives was great.

The idea, I believe, originated in Germany, where A. Koppel, and later Orenstein & Koppel built quite large numbers of them, and anyone interested may like to know that one of these German-built fireless locomotives, built in 1916, works at the Purfleet, Essex, factory of Messrs. Van Den Berghs & Jurgens, Ltd. along with two Andrew Barclay fireless locomotives, also built in 1916. Other firms in this country who have built fireless locomotives are Hawthorn Leslie & Co., Ltd., and their successors Robert Stephenson & Hawthorns Ltd., while a newcomer to this field of operations is Peckett & Sons Ltd., of Bristol, who in 1955 built their first fireless locomotive to the order of C.W.S. Ltd., for use at Irlam Soap Works, Manchester; this locomotive is of the 0-4-0 type, with 12 by 20 in. cylinders, wheels of 3 ft. 0½ in. diameter, and a wheelbase of 5 ft. 3 in., and some quite novel methods have been used in its construction.

You may perhaps recall that I wrote you some time ago, advocating more articles of an "Industrial" nature, because of the growing interest in this field nowadays. I must say that you certainly seem to have acted upon it, as we have had several choice tit-bits of late, so may I say they were much appreciated.

Stockingford, Nuneaton. M. J. LEE.

MOTIVE POWER MISCELLANY

LONDON MIDLAND REGION

" Britannia " on the Lickey

On April 5 " Britannia " No. 70032 was supplied to haul an excursion organised by ourselves from Euston to Crewe and back. A similar trip was run from Birmingham in the following week, on which the same Pacific was to be used, and it appears to have spent the interim at Aston shed. On April 7 it worked to Bristol, the first time a " Britannia " has travelled the Lickey incline ; of the train it hauled we have no information, but it was not a *Trains Illustrated* excursion, despite the fact that No. 70032 apparently still had our headboard in position. The Pacific had returned to Bournville shed by April 9. The Lickey 0-10-0 No. 58100 is rumoured to have been withdrawn on May 6 and replaced by 2-10-0 No. 92079.

On Easter Monday Carlisle Kingmoor " Jubilee " No. 45640 worked through from Leeds to London with the 11.50 a.m. Bradford-St. Pancras and returned north next day on the down " Thames-Clyde Express " ; it was succeeded on this diagram by No. 45621 (67A) on April 3. Another unusual sight on Easter Monday was that of 2-6-4 tank No. 80092 piloting " Jubilee " No. 45598 from Bedford to St. Albans on the 10.50 a.m. Bedford-St. Pancras, loaded to a dozen non-corridor bogies. Three more Stanier " 5 " 4-6-0s have arrived at Bedford and only one compound, No. 41079, remains there in store. Another three compounds, Nos. 41048/9 and 41199, have been stored at Wellingborough, but on Easter Thursday No. 41048 was out and working the 3 p.m. Cricklewood-Leeds milk empties, while No. 41049, transferred to Leicester, had charge of the 3.20 p.m. St. Pancras-Kettering. On April 7 Saltley 4-4-0 No. 40928 headed the 12.38 p.m. St. Pancras-Luton, an unbalanced job used by Kentish Town to send home " foreign " engines, which usually travel on light from Luton ; No. 40928 turned up again on April 16, piloting " Jubilee " No. 45656 on the 7 a.m. Sheffield-St. Pancras.

"J94s" to take over High Peak ?

A visitor to the Cromford & High Peak line in mid-April was surprised to see " J94 " No. 68030 (6F) making a gingerly approach to the top of Hopton Incline from the Buxton direction and to learn that the staff at Middleton Top anticipated early withdrawal of the ex-North London tanks in their charge and their replacement by " J94s." Another invader of Midland territory, ex-L. & Y. 2-4-2 tank No. 50650, has been seen working the Higham Ferrers branch from Wellingborough. The Mondays-Fridays Edge Hill duty on the 1.58 p.m. Northampton-Nottingham, which has lately given Midland observers frequent views of " Patriots," seems to have ended; recently Rugby " 5 " 4-6-0s have been working the train throughout the week.

" Britannias " at Ais Gill

On April 4 the 10.35 a.m. Leeds-Glasgow took no chances over Ais Gill with its combination of " Jubilee " No. 45707 (67A) and Pacific No. 70052 (66A) ; a "Britannia" was again on this train on April 26, when No. 70050 (66A) had sole charge. Reverting to last month's notes, it seems there might be a regular working of a Carnforth district ex-L.N.W. 0-8-0 to and from Rose Grove ; a correspondent reports several recent distant observations of these engines between Skipton and Leeds and positively identified No. 49130 (11A) on a northbound train on April 23. " Clan " Pacific No. 72005 headed a northbound freight through Skipton on April 15.

2-10-0 at Rose Grove

Rose Grove had a view—its first, our correspondent believes—of a standard 2-10-0 early on April 25 when No. 92057 arrived on the 11.20 p.m. freight from Wyre Dock. That day No. 92057 performed the rest of the diagram—6.18 a.m. Rose Grove-Hall Royd Junction and 12.30 p.m. empties Burnley (Manchester Road)-Rose Grove—then ran light to Whitebirk, where it was attached to the 5.48 p.m. Whitebirk-Crofton empties. Another " O4," No. 63763, was seen on the Calder Valley main line at Elland on the afternoon of April 28. A rare sight at Rose Grove on April 21 was " Patriot " No. 45544 (10B) ; it headed the 5.20 a.m. Preston-Todmorden, 8.14 a.m. Todmorden-Rose Grove and 9.7 a.m. Rose Grove-Great Harwood-Preston trains. Another infrequently seen type on the Calder Valley main line, whose only two regular duties, both from Normanton shed, are worth recording is the " 2P " 4-4-0 ; their jobs are on the 7.55 a.m. Normanton-Sowerby Bridge and 10.7 a.m. Sowerby Bridge-Wakefield, and the 5.8 p.m. Normanton-Sowerby Bridge and 7.22 p.m. back. Easter Monday at Huddersfield saw a " WD " 2-8-0, No. 90570 (27D), taking out a heavily loaded special for Blackpool and 2-6-4 tanks Nos. 42409 (25B) and 42551 (26E) chimney-to-chimney on a special from Holmfirth to Morecambe via Leeds ; the motive power shortage later that day was such that ex-L. & Y. 0-6-0

No. 52521 (25F) was turned out to work a local train to Bradford. In the second week of April ex-L.N.W. 0-8-0 No. 49049 (2A) was the star of a mixed bag of locomotives seen on a " chicken special " that uses part of the Manchester-Stalybridge-Leeds route ; it originates from Mytholmroyd, on the Calder Valley line, and runs thence to Thorpes Bridge Junction (Manchester), Miles Platting and Droylsden, where it diverges through Denton and Reddish to terminate at Adswood Sidings, Stockport.

" Scots " double-head in Furness

A spectacle probably unprecedented in Furness resulted from the use on two occasions in April of " 7P," instead of "5" or "6P" 4-6-0s, on the 8.30 a.m. Carnforth-Barrow. On April 12 No. 46141, newly transferred to Upperby, was provided and worked the 1 p.m. Barrow-Euston back with rebuilt " Patriot " No. 45545 as pilot ; No. 46141 returned from Preston with the 11.45 a.m. Euston-Workington and left again on the 8.37 p.m. Barrow-Euston. Four days later No. 46135 (12A) appeared on the 8.30 a.m. Carnforth-Barrow, and on this date it joined No. 46104 (66A) on the 10.50 a.m. Workington-Euston as far as Lancaster. On March 28 the up " Royal Scot " appeared at Carlisle two hours late behind tender-first " 5 " 4-6-0 No. 45090—of Inverness !

" Clans " in North Wales

At the beginning of April some " Clan " Pacifics completed overhaul at Crewe and, whilst running in, paid visits to quarters where they are not usually found. On the evening of April 2 No. 72002 was observed at Southport and four days later it headed the 6.35 p.m. Chester-Rhyl, a train again " Clan "-hauled on April 7, when No. 72004 was the engine. Instead of the usual Holyhead 4-6-0, 2-6-4 tank No. 42540 (6A) worked the 11-coach 4.25 p.m. Holyhead-Manchester (Exchange) on March 29, arriving 30 min. late, while an unusual sight at Chester on April 13 was the arrival of the 11.45 a.m. Birkenhead-Paddington behind compound No. 41106. Standard 2-10-0 No. 92077 was a visitor to Birkenhead shed while running-in from Crewe on March 18.

" N5 " No. 69342 became derailed at Storeton, on the Seacombe-Shotton line, on April 17 and as a result a 4-6-0 was brought on to this branch for the first time, our correspondent believes. The engine was No. 75033 (6A), which arrived with the Chester crane, having propelled it to the scene from Mickle Trafford, junction point of the ex-C.L.C. and L.N.W. Chester-Manchester lines.

The West Coast main line

Watford saw more Southern Pacifics on April 21, when a schoolboys' international was played at Wembley. From the S.R. heading excursions came Nos. 34046/8/67 ; the first of the trio was serviced at Willesden, but the other two continued to Watford with their empty stock and then turned themselves on the Watford (High Street) triangle. Several excursions from the Midland Division were noted at Watford, producing Class " 5 " 4-6-0 No. 73004 (15C), Nos. 44856 and 73054 (17A) in tandem and the fortuitous pairing of Nos. 44861/2 (16A and 2A respectively) on the same train.

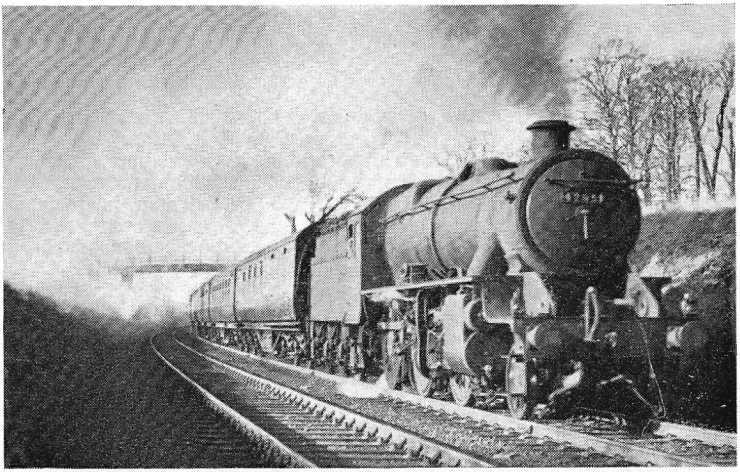
[For L.M.R. information we are indebted to Messrs. B. Geens, P. Lisseter, H. Macdonald, E. R. Battye, J. Gibson, B. C. Pratt, D. McVety, N. Townend, M. G. Creasy, J. Noble, G. C. Trinick, A. S. Woodcock, L. Kay, R. Mashiter, F. Talbot, M. G. Webb, A. Swaine, B. Stott, P. J. Hobart, D. S. Riley, P. B. Harrison, R. J. Ellison, F. A. Lewis, C. G. Hulme, G. Bartley, P. Heath, P. R. Andrews, M. J. Horrobin, S. Barton, K. Beck, J. W. Powell. N. Oliver, R. W. Murray, C. W. Woodhead, G. R. Smith, J. A. Ferguson, P. H. M. S. Wood, C. N, Garratt, K. Pilling.]

EASTERN REGION

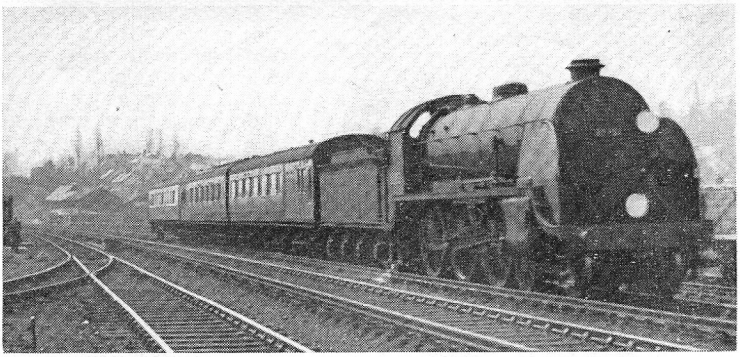
The East Coast main line

Until late April little had been seen of the standard and Stanier " 5 " 4-6-0s loaned to King's Cross (it appears that No. 73071 languished at Cambridge for some time awaiting replacements after the rocking grate failure reported in the April issue). Then, on the third week-end of April, Nos. 44911 and 73071 both reappeared in King's Cross from Doncaster, where they had been equipped with A.T.C. apparatus and resumed on King's Cross-Cambridge trains. During April ex-G.E. 0-6-0s from Cambridge were regularly seen on King's Cross shed ; " J17 " No. 65520 was there on April 13, but the most frequent arrivals were " J20s " Nos. 64694/6. On April 12 an unusual sight at King's Cross was a " K1 " 2-6-0, No. 62039 (31B), on the 1.20 p.m. from Peterborough. Undergoing boiler repairs at King's Cross shed on April 13 was Neasden " N5 " 0-6-2 tank No. 69315 ; Haymarket " A1 " No. 60143 was also there on this date, and reappeared in London on April 23. Another Haymarket " A1 " recently observed in the south after overhaul at Doncaster is No. 60162 ; on April 26 it ambled southward with the 1.45 p.m. Class " E " Doncaster Decoy-King's Cross freight, returning north next day with the 7.35 a.m. Class " D " Clarence Yard-Hull. On April 21 Heaton " A2/3 " No. 60517 brought the up " Northumbrian " into London after the King's Cross " A4 " on the previous evening's down " Tees-Tyne Pullman " had failed ; the stranger spent

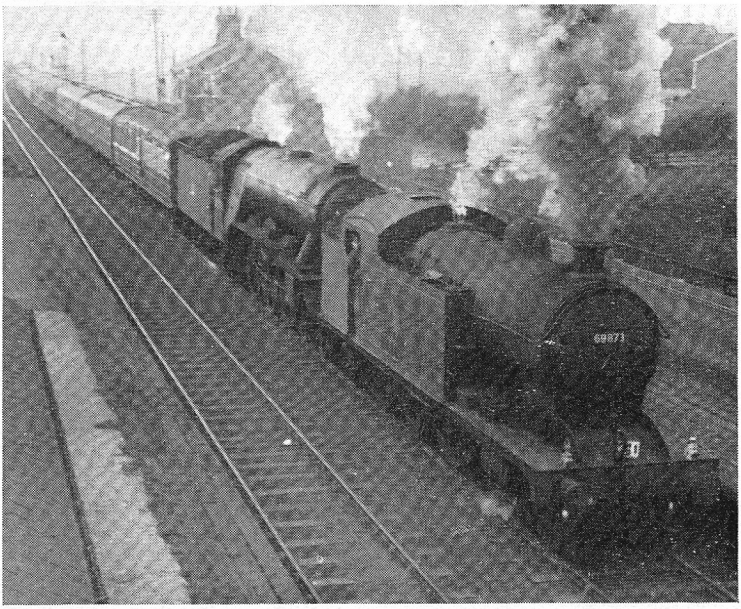
NEWS-REEL



★ A rostered express passenger turn for a 2-6-0 is a rarity on the West Coast main line especially when a Stanier 2-6-0 may be involved. It seems, however, that a 2-6-0 of Aston shed is now the usual power for the Sunday 4.20 p.m. Carlisle-Preston, seen climbing out of Carlisle to Wreay behind No. 42951 on April 1, 1956.
[R. Leslie



★ Strange sight on the Brighton line these days is a "King Arthur" 4-6-0; on April 18 last No. 30753 *Melisande*, then at Brighton as officially withdrawn, was given an unexpected last day's work on the 9.25 a.m. Hastings-Birkenhead, with which it was photographed near Redhill; it then returned to Eastleigh to await scrapping.
[G. Davies



★ Unusual combination of "A8" 4-6-2T No. 69873 and "A3" 4-6-2 No. 60074 *Harvester* double-head a Leeds-Newcastle excursion diverted via Wellfield and photographed near Hart, north of Hartlepool, on April 15, 1956.
[F. R. Bell

the following Sunday at King's Cross, then took out the down "Heart of Midlothian" on April 23. The "W1" 4-6-4 was in trouble again on April 17. Travelling by the 4 p.m. King's Cross-Grimsby on that date, we were diverted onto the slow line round the preceding 3.52 p.m., headed by No. 60700, north of Hitchin; we heard that the 3.52 later reached Peterborough 40 min. late behind "K3" No. 61914.

The Easter holiday programme had one interesting feature in the greater use made of driver's route knowledge to reduce train stops mainly necessary for operating purposes. Thus two Leeds engines and men were rostered through to Peterborough, where Leeds locomotives are not usually changed, and the 2.59 p.m. Leeds-King's Cross relief made an unusual non-stop run from Wakefield to Peterborough; equally novel was the non-stop run from Newark to King's Cross of the 3.33 p.m. Leeds-King's Cross on April 29, a duty which was made part of an additional Leeds lodging turn that night (King's Cross also operated an extra lodging turn to Leeds). Traffic on April 29 was very heavy. Up trains fell behind time after a morning service from York, due King's Cross at 12.52 p.m., had had to halt at Yaxley with a defective coach, and when the delay reacted on the 9.11 a.m. relief from Grimsby, due at 1.18 p.m., the trouble passed on to the down line, since the latter's coaches were to form a 1.55 p.m. King's Cross-Newcastle relief. The "Bradford Flyer" had a bad patch in Easter week, reaching King's Cross three times in seven working days behind a "V2" after Pacific failures, the arrivals being 1¾ hours late on March 29 and April 3, when the trouble occurred at Doncaster and Wakefield with Nos. 60117/8 respectively; then, on April 5, "A3" No. 60046 had to come off the down train at Peterborough with a hot box and "V2" No. 60893 carried on to Leeds, reached 27 min. late.

G.C. at Marylebone again

To mark the jubilee of the G.C. & G.W. Joint line through the Chilterns, two "A5" 4-6-2 tanks were loaned by Colwick to Neasden for the first part of April; No. 69801 dealt with several Marylebone suburban services, while No. 69804 acted mainly as carriage pilot at the terminus, and both returned to Colwick on April 16. Another provincial visitor to Neasden on April 7 was York "A2" No. 60526, which headed a Bishop Auckland F.C. supporters' excursion to Wembley Hill. Neasden has been embellishing its "L1s"; a reader reports that, in addition to silver-painted smokebox door bars and hinges, one or two have red-backed numberplates, while one *avant-gardiste* crew has experimented with bright blue paint on these smokebox fittings. One of Neasden's "4MT" 2-6-0s, Nos. 76040, regularly hauls the 10.47 a.m. freight from Harrow over the L.T.E. Uxbridge branch. A derailment of the 5 p.m. from Baker Street whilst shunting at Aylesbury on April 13 blocked the down main line for some hours and also caused the appearance of a type probably unprecedented in the area, for at 8.20 p.m. that evening the Woodford Halse breakdown train passed northward through Chalfont behind "J20" 0-6-0 No. 64689 (30A), which returned south with the crane next morning.

"West Country" at Stratford

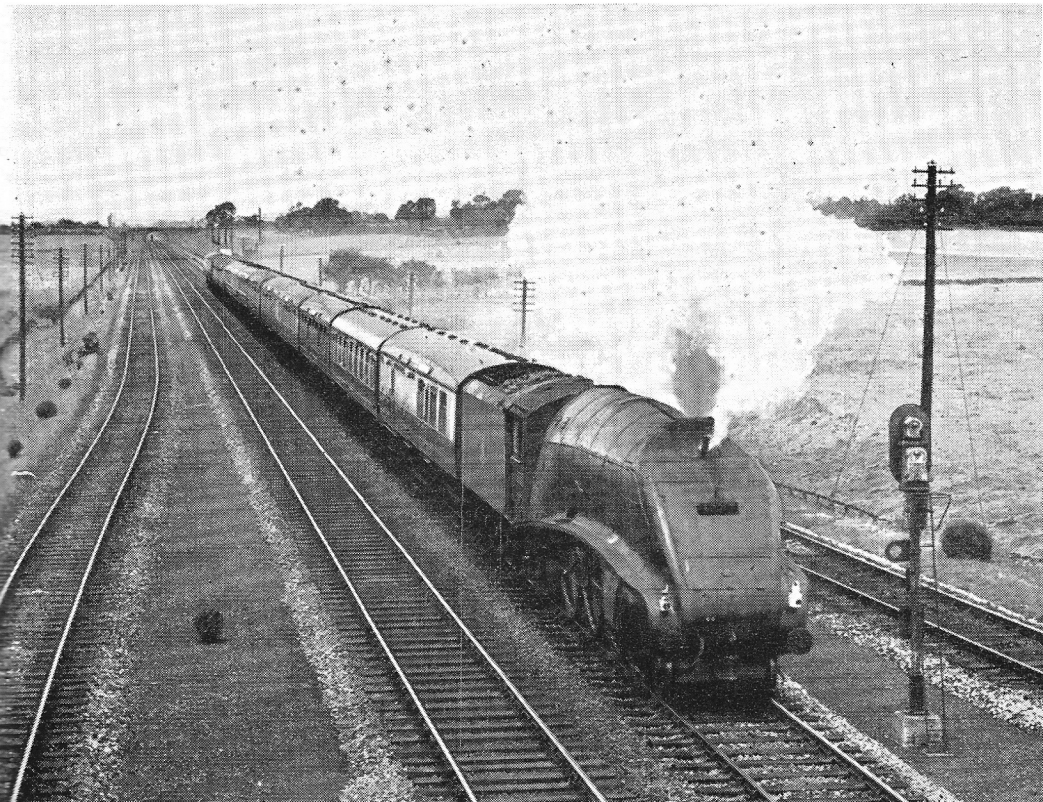
A banana special from Southampton docks arrived at Temple Mills yard via the West London line, Canonbury and Victoria Park behind S.R. Pacific No. 34008 on April 17. On the previous day one of the "Q1" 0-6-0s customarily used on the regular Feltham-Temple Mills freight jobs, No. 33009, was seen further afield at Goodmayes, where diesel electric 0-6-0s have now supplanted "J50s" as yard shunters. Another interesting cross-London working was observed on April 24, when standard "5" 4-6-0 No. 73069 (17A) travelled through Stratford (Low Level) with what were believed to have been freights between Cricklewood and Woolwich. "B17" No. 61663 was noted at Grays, on the Tilbury section, bound for Tilbury docks with a train of E.R. stock on April 10; three days later our correspondent recorded standard "4" 2-6-0 No. 76030 on a Tilbury freight at Grays. He adds that the diverting spectacle of a "Jinty" 0-6-0 or ex-Tilbury 0-6-2 tank piloting a "WD" 2-8-0 can usually be seen nightly on a freight pulling out of Ripple Lane sidings at about 6.40 p.m. for Thames Haven; on April 23 the combination was 0-6-2 tank No. 41991 and 2-6-4 tank No. 42679. A newcomer to the Grays-Upminster push-and-pull service on April 23 was No. 69690 (32A), the first "N7" to be seen on this duty for some weeks. An Ipswich engine is now regularly diagrammed through to Bletchley, for engine-changing on the 7.10 p.m. Ipswich-Cardiff freight at Cambridge has been cut out.

Following the closure of Belle Vue shed a number of ex L.M.S. locomotives have now come under the care of Gorton shed. They include two ex L. & Y. 0-6-0 saddle-tanks.

[For E.R. information we are indebted to Messrs. R. N. Ball, G. Tweedie, M. Parkinson, J. N. Harcourt-Webster, J. C. Newman, S. Fox, R. A. King, N. Caplan, D. J. Lloyd, D. Brewin, B. A. Holyland, P. Thorpe, R. Sanders, J. P. Andrew, D. Wilson, N. D. Mundy, C. Allison, R. Ferrani, P. Walpole, G. A. Styles, R.W.N.F., C. W. Brand, D. M. Lear, D. Coleman, R. E. Martin, I. Lawson.]

Above : A down Kent Coast express near Teynham, between Sittingbourne and Faversham, in September, 1955, headed by S.R. Class "N15" 4-6-0 No. 30793 *Sir Ontzlake*. [*P. Ransome-Wallis*

Below : The classic North-Eastern race-track—the East Coast main line near Northallerton, with Class "A4" 4-6-2 No. 60017 *Silver Fox* hurrying southward on a Newcastle-King's Cross express on July 7, 1954. [*Eric Treacy*



NORTH-EASTERN REGION

" J63s " cut up at Darlington

The latest ex-G.C. types to be broken up at Darlington are Class " J63 " 0-6-0 tanks Nos. 68204/5/7. At York on April 5 a 2-10-0, No. 92062 (15A), was seen outside the shed. Most notable of recent L.M. visitors to N.E.R. territory has been No. 80051 (26A), seen at Goole on the 3.46 p.m. to Wakefield on March 31 and believed to have been the first standard 2-6-4 tank to reach Goole ; Class " 5 " No. 45318 (24E), with an excursion from Hebden Bridge, was the outstanding Easter Monday L.M. tripper through Driffield.

[For N.E.R. information we are indebted to Messrs. R. Bell, J. Taylor, " Ern," C. D. Robinson, D. Temperley, P. N. Dean, and L. A. Pickering.]

WESTERN REGION

First " 57XX " panniers go

The latest list of condemned engines includes " 57XX " 0-6-0 pannier tanks (Nos. 5700/62) for the first time ; it is reported that other classes into which the first inroads are imminent are the " 28XX " 2-8-0, " 2251 " 0-6-0, " 3100 ", " 5101 " and " 61XX " 2-6-2 tanks, and the " 54XX" 0-6-0 pannier tanks. The latest addition to the types being painted green at Swindon rather surprisingly is the " 63XX " 2-6-0 class, of which Nos. 6372/85 have been turned out in G.W. green, with polished safety valve covers, to haul H.M. the Queen's train from Taunton to Barnstaple on May 7. It seems that the " Granges " or " Manors " may join the types in B.R. green, since there was a 3,500 gallon tender in green livery in the paint shop on April 11. The latest " County " with a double chimney is No. 1022, which has also been equipped with a self-cleaning smokebox ; experiments with a double-chimney on " Castle " No. 7018 are reported to be in progress. By the end of April work on Swindon's new construction of 2-10-0s had not proceeded beyond the frames of Nos. 92087/8, but the first coach of a diesel unit for the Scottish Region was complete in the carriage and wagon shops. "Castle" No. 5066 was ceremonially renamed *Sir Felix Pole* at Paddington on April 24.

Diesel railcars destroyed

Three diesel railcars were recently destroyed by fire. On March 9, No. W10 caught fire in Bridgnorth (Salop) station and despite the efforts of the local fire brigade and the station staff, it was damaged beyond repair. Then, on April 10, after a fire in the driving compartment of the 9.5 p.m. Bath-Bristol had been extinguished at Saltford, another broke out in the tunnel at the approach to St. Anne's Park station. By the time the driver had reached the open air the flames had taken such a hold of the leading car of the twin unit (Nos. W35/6), that he could only stop promptly and jump from his cab ; he then hurried to help the guard save parcels from the rear car (both cars fortunately were empty of passengers). Fire appliances arrived too late to salvage either vehicle. Since the incident, the three diesel rosters filled by the twin unit have been adapted for working by a steam train, a single diesel car hauling a trailer, and two double-ended diesels (Nos. W24/5) coupled together.

Timekeeping improves

Several correspondents report an improvement in timekeeping on the main lines from Paddington. Early arrivals are again being registered by the up " Bristolian," while a Taunton reader has noted the down " Torbay Express " through his home town (142 miles) in 132 min. (with " Castle " No. 7029 and seven bogies), amongst other gains of time by principal expresses from Paddington. The outstanding feat occurred on April 26. According to the guard the 3.30 p.m. Paddington-Plymouth had left London 7 min. late that day because its " King," No. 6021, had been routed on to the wrong train. Despite that, however, our correspondent asserts that the train of nine bogies (a slip had been detached at Westbury) rolled into Taunton 13 min. early, having covered the 142 miles in 128 min. Unhappily a connecting train from Barnstaple was running late and the 3.30's stop at Taunton lasted for 26 min., so that its departure was again late to the tune of 9 min. Oddity of the Easter traffic at Paddington was the appearance of 2-6-2 tank No. 6138 on the 4.30 p.m. from Oxford and the 8.20 p.m. Paddington-Oxford (evidently a deliberate choice of power, as the down train was sent out of the suburban station). On Easter Thursday the Christmas delays of down West of England trains were unluckily repeated as " King " No. 6023 failed at Slough on the 5.30 p.m. from Paddington ; 2-6-2 tank No. 6127 worked the express forward to Reading, whence it was not despatched until 7.3.

Incident in Sodbury Tunnel

On April 10 the 8.55 a.m. Paddington-South Wales reached Cardiff all but four hours late owing to the complete failure of " Castle " No. 7021 with seized motion in Chipping Sodbury tunnel. This occurred at 11 a.m. A pilotman arrived on "Grange" No. 6833 at 11.25 to institute single line working and No. 6833 was then attached

to the rear of the 8.55. The latter was then hauled back into Badminton up platform, leaving No. 7021 in the tunnel to be attended to by the breakdown train, which went by on the down line at 1.25 p.m. with " Hall " No. 5902 in charge. At 1.45 some hope came from Bristol to the unhappy passengers of the 8.55, but in the dubious form of " Castle " No. 4084, whose condition and performance were to show why express work had not lately been among its tasks when the train at length restarted from Badminton at 2.5 p.m.

Crosti 2-10-0s at Oxford

A reader supplies details of the duties which are bringing both orthodox and Crosti-boilered 2-10-0s to Oxford. Their usual job is on the 2 p.m. freight from Irthlingborough (near Wellingborough), due into Yarnton at 7.20 p.m., and then, after a night on Oxford shed, the 10.15 a.m. Yarnton-Swanbourne Sidings (between Verney Junction and Bletchley), but they have also been used on the 8.20 p.m. (8.25 SO) Irthlingborough-Yarnton and the 3 a.m. eastwards from Yarnton to the L.M.R. These trains are mainly ironstone loads and empties to and from Ebbw Vale via Oxford, Honeybourne and Gloucester. Our correspondent also corrects a previous report, pointing out that the 2-10-0s can be turned on Oxford shed or on the Yarnton yard turntable. Visitor to Oxford with a local from Banbury on April 29 was 2-6-2 tank No. 82030 (84G).

Newton Abbot repairs a " 66XX "

For the first time in over two years, Newton Abbot works had an 0-6-2 tank, No. 6601 (82B), in for repair on April 18 ; also on the works that day was 2-6-2 tank No. 5555 from Tondu. Early in April a 2-8-0, No. 2822, was doing duty on broccoli traffic at Truro ; these engines are rare west of Plymouth.

[For W.R. information we are indebted to Messrs. T. G. Partridge, P. Heath, M. C. Harris, A. P. Clark, C. N. Garrett, J. Dean, M. G. D. Farr, C. W. Portch, J. M. Craig, R. Simons, P. Tucker, M. Hedges, M. C. Clifton, J. Powles, M. R. Dunn, P. J. Wheeler, D. A. Lewis, D. Halton, R. Keast and B. Williams.]

SOUTHERN REGION

Western Section

A visitor to Eastleigh works on April 5 learned that the S.R. " Merchant Navy " Pacifics so far scheduled for rebuilding are Nos. 35013/6-30 ; no plans have yet been laid, he gathered, to deal with any light Pacifics. The first observation of the prototype rebuild, No. 35018, on the Exeter line was reported in the last week of April ; it headed the 9 a.m. Waterloo-Exeter and the 4.30 p.m. Exeter-Waterloo on April 26 and 27, but was on the "Bournemouth Belle" the following day. On April 27, the rebuilding of No. 35020 had been completed at Eastleigh and No. 35022 was in for conversion. A correspondent who heard No. 35019 climbing Honiton bank recently detected a very much changed exhaust note and wondered whether it has had its single blast pipe and chimney altered.

A notable guest of Exmouth Junction shed at the beginning of April was a standard " 4 " 2-6-0, No. 76005, which was undergoing repairs. No. 76005 has since remained at Exmouth Junction and has been joined by No. 76027 ; it is believed this type may replace the shed's standard " 4 " 4-6-0s, which are tight on some Devon turntables. Exmouth Junction depot now has a pair of " Z " 0-8-0 tanks ; No. 30954 has been exchanged for No. 30956, and the latter has been joined by No. 30950 from Ashford, which was seen reversing from the Guildford line on to the West of England route at Woking on April 5 in the course of travelling to its new home. On April 30 Pacific No. 34039 (75A) headed the 11 a.m. Plymouth-Brighton through Honiton.

In the London area a stranger observed at Surbiton on April 17 was Class " 2 " 2-6-2 tank No. 41242 (71G), on its way back light to S. & D. territory via the Western Section after repair, not at Swindon as is usually the case with these S.R. engines, but at Crewe. On the same date a gleaming " West Country," No. 34092, travelled down light from Stewarts Lane to Fratton preparatory to hauling the Pullman special of Messrs. Bulganin and Kruschev from Portsmouth to Victoria via Guildford, Effingham Junction, Sutton and Mitcham Junction on April 18. Once again the 5.53 p.m. from Exeter arrived in London double-headed on April 27, the Pacifics concerned being Nos. 34020 (70A) and 34054 (72B). The same day Class " 4 " 4-6-0 No. 75072 (72A) was seen running up light into London, while next evening Bath standard " 5 " 4-6-0 No. 73050 headed a special parcels train from Waterloo to Southampton Docks.

" Terrier " at Dover

After the recent tests of the ex-K. & E.S. " Terrier " No. 32670 on the dock lines at Dover, another " A1X," No. 32636 (74E), appeared at Dover shed in April. No. 32640 of this class, by the way, although nearly 80 years old, has just survived a general overhaul at Brighton works ! News of other ex-Brighton types is that the Atlantics are at work again ; No. 32425 was in action on one of the cross-country trains between Portsmouth and Brighton in the last week of April,

and No. 32422 has also been observed in steam. On May 6 the 3.35 p.m. Victoria-Ramsgate was double-headed by Pacific No. 34071 and 4-6-0 No. 73081.

Another "Merchant Navy," No. 35004 (72A), was at Bricklayers Arms early in April. It was receiving extensive repairs to its axles.

[For S.R. information we are indebted to Messrs. J. B. Cakebread, P. S. Norman, G. K. Cousins, T. Handorff, A. Koolman, R. May, D. Sankey, B. R. Whitty, P. W. Rosewell, J. C. Fowles, P. Goodfellow, M. Fulton, B. R. C. Elphick, P. K. Tunks.]

SCOTTISH REGION

Scotland's first diesel trains

Two Metropolitan-Cammel diesel twin-units have been loaned by the Eastern to the Scottish Region and are based at Leith Central for crew-training; they were seen at Polmont on April 27 in the course of trial runs between Edinburgh and Glasgow. Another diesel development which we hear may accompany the inauguration of the summer services is the revival of diesel haulage on the "Royal Scot"; it is understood that Nos. 10000/1 and 10201/2 will be used as pairs to operate the 9.10 p.m. Euston-Glasgow and the 9.25 p.m. Glasgow-Euston as balancing turns to the up and down "Royal Scot" respectively. An unusual visitor to Edinburgh (Princes Street) on April 25 was "A3" Pacific No. 60041, heading the 3.32 p.m. from Stirling, usually the job of a Dalry Road 2-6-4 tank.

The Waverley Route

A visitor to Galashiels at Easter found that the days of the two "J67" 0-6-0 tanks uniquely paired with ex-"J36" tenders to work the Lauder branch may be numbered. Because of their age, Nos. 68492 and 68511 are not popular, and their crews were much more enamoured of Class "2" 2-6-0 No. 46462, which was in use on the branch in the last week of March to deal with heavy traffic. Standard "2" 2-6-0 No. 78049 worked an inspection special from Edinburgh to Hawick on April 2 and continued to Carlisle the next day, while on April 19 "D11" No. 62687 (65A) headed the 4.10 p.m. Edinburgh-Hawick. "K3s" Nos. 61897 and 61924 (64A) were uncommon performers on the Border Counties line during April. Another standard "3" 2-6-0 appeared at Edinburgh (Waverley) on April 1 when No. 77011 (52C) powered the Sunday 9 a.m. Hawick-Edinburgh and 8.25 p.m. back.

Report from Aberdeen

Good Friday visitor to Aberdeen was Pacific No. 46211 (8A) on the "Bon-Accord." After repair at Inverurie "Director" 4-4-0 No. 62681 (65A) was given an unusual task on April 4, taking a "V2's" place on the 2.52 p.m. freight from Aberdeen to Tweedmouth and Newcastle. Recently overhauled at Inverurie was the Kyle of Lochalsh pilot engine, ex-Caledonian 0-4-4 tank No. 55216.

[For Scottish information we are indebted to Messrs. A. Hogg, M. J. Lunan, J. Landsborough, R. B. Myles, K. A. Gray and D. W. Smith.]

LOCOMOTIVE STOCK CHANGES

"N.Y.A." denotes "not yet allocated" (on official lists received). This list is correct to the following dates: L.M.R.—March 24, 1956; E. & N.E.R.—April 21, 1956; Sc.R.—March 17, 1956; S.R.—April 20, 1956; W.R.—February 25, 1956.

NEW ENGINES

"9400" class 0-6-0PT: 3404-N.Y.A.; **Diesel Mechanical 0-6-0**: 11155-34A; **Diesel Mechanical 0-4-0**: 11506-30A; **Diesel Electric 0-6-0**: 13212/3/4-65C; 13215-65B; 13216-N.Y.A.; 13298-30A; 13299, 13300/1/2-30A; **Class "5" 4-6-0**: 73124-67A; **Class "4" 2-6-4T**: 80133/4-33A; **Class "9F" 2-10-0**: 92077/8-18A.

ENGINES WITHDRAWN

307/67, 1413, 2101, 3010, 3164, 5700/62, 6321, 31063, 31704/69, 32333, 32460, 32610, 40521, 41065, 41128/47/91, 41777, 43334, 43874, 47992, 49322/54, 49603, 51488, 52104/67, 52450, 56231, 57320, 57457, 58117/59/94, 58812, 58862, 65165, 67240/51/90, 67302/12/32/4/47, 67458/78/80, 68204/5/7, 68476, 69339.

ENGINES REALLOCATED

London Midland Region: 12072-18A; 13089-8C; 13120-9D; 13180-17A; 40080-3C; 40207-2B; 40584-27D; 40681-26C; 41223/4-3C; 41320-1C; 42051, 42132-20G; 42285-25D; 42320-2A; 42324, 42407/11-25C; 42343-12A; 42419/20/1-5D; 42477, 42553-25D; 42489, 42552, 42601/58-3E; 42673-2A; 42770-20E; 42784-16A; 42862/5-26B; 43114-20A; 43553-20E; 44019-25A; 44039-19A; 44492-3D; 44512-3C; 44596-12A; 44601-17A; 44714-6J; 44942-3D; 45000/2, 45150-5A; 45113-9A; 45304-10C; 45310-3B; 45344-3C; 45390-5A; 45407-17A; 45552, 45613-12A; 45634/78, 46212-5A; 46436-26D; 46437-26A; 46497-16A; 47972-18C; 48037, 48112-18A; 49377-2A; 49648-26B; 51481-27A; 52121-25D; 58174, 58203-3C; 58279/88-10C; 73015-17A; 73074-19B; 90163-26A; 90412-25E; 90556-24F.

Eastern Region: 41702, 43612/30/8, 43927, 44025, 44114, 47336, 51484, 51504-39A; 60044-34A; 60063-34E; 61312-32A; 61392, 61634-31A; 61918-32C; 65433-32B; 65472-32A; 68491-35B; 68877-38A; 69457-37C; 69696-37B.

North Eastern Region: 12115-53C; 40012-53D; 40060-53B; 60802/9/83, 60957-52B; 65677-53A; 67263-52F; 67270/8/94, 67333-54A; 67315/25-50F; 68361, 69786-53C; 92060/1-54B.

Scottish Region: 13211-62A; 43132/4-65E; 45173-64D; 47331-66C; 47332-68A; 55217-62A; 57622/5-66A; 61134-62A; 61330-64A; 67603-65A.

Southern Region: 30055-75A; 30059-71B; 30950/6-72A; 31278, 31329-75F; 31319-74A.

Western Region: 368-88E; 377-88C; 1472-83A; 1616-85B; 3402/3-88B; 3652-86B; 3692-82A; 3769-84A; 4114-85D; 4200/59-86H; 4227-86A; 4697-81D; 4947-82A; 4969-81D; 4976-85A; 4991-83B; 5012/22/39/43-81A; 5049/72-83D; 5347/79-84G; 5632-88F; 5736-86B; 5755/66-81B; 5963-82D; 6155-86E; 6325-86G; 6363-82A; 6378-84G; 6644-86C; 6908-82A; 7014-81A; 8702-83E; 8713-84E; 9318-84G; 9740-84K.

ENGINE RECLASSIFIED

67600 from "V1" to "V3."

MOTIVE POWER DEPOT CLOSED

Belle Vue, 26F, as from April 16, 1956.

SOCIETY COLUMN

STEPHENSON LOCOMOTIVE SOCIETY

THE Stephenson Locomotive Society has arranged a special train tour from London Bridge to Brighton on Saturday, June 23rd, starting at 1.2 p.m. as a non-stop 60-minute run behind Class "N15X" 4-6-0 No. 32329 *Stephenson* (originally an L.B.S.C. 4-6-4 tank). A visit to Brighton locomotive works will follow and the return journey commencing at 6.23 p.m. will be along the pretty mid-Sussex and Surrey hills route by way of Steyning, Horsham, Dorking, Sutton and Peckham Rye, arriving back at London Bridge at 8.46 p.m. with another ex-L.B.S.C. engine in charge, a Class "K" 2-6-0. Inclusive fare will be 15s. 6d. Applications for tickets should be made to Mr. J. S. Davies, 10 Walton Croft, Cavendish Avenue, Harrow, Middlesex, enclosing necessary remittance with stamped addressed envelope. A Midland area special train, hauled by an L.M. compound 4-4-0, will travel to Doncaster for works and motive power depot visits and then to York, for a visit to the Railway Museum and locomotive shed on Sunday, June 17. Departure from Birmingham, New Street, will be at 9.35 a.m.; Derby, Friargate, 10.50 a.m.; and Basford North (for Nottingham passengers), 11.20 a.m. The outward route is via Newark and the ex-G.N. main line, returning via Rotherham, Masboro', and thence the Midland route to Derby (due 8.32 p.m.) and Birmingham (9.42 p.m.); Nottingham passengers will change to an ordinary train at Derby. The fare will be 25s. 6d. from Birmingham and 21s. 6d. from Derby or Nottingham districts; a limited number of half-fares must be booked early. Readers requiring tickets should remit to S.L.S. Rail Tours, 16 Hutton Road, Handsworth, Birmingham, 20, enclosing stamped addressed envelope, as soon as possible.

THE RAILWAY ENTHUSIASTS' CLUB

OVER 150 members and friends—the maximum seating capacity of the train—took part in the extremely successful "Severn Venturer" tour of April 15. Headed by a Class "4" 4-6-0 No. 75000 for the two main line sections of the tour, from and to Swindon, the train also traversed the closed branches to Thornbury, Nailsworth, Stroud, and the Severn and Wye Joint line to Serridge Junction. On Saturday, April 14, Mr. R. K. Kirkland visited the clubrooms and gave a most interesting and well-illustrated talk on the subject of "Steam Rail Motors," which was followed by a period of keen questioning. This talk brought the 1955/56 "indoor" season to a close; the 1956/57 series of lectures and film shows will commence on Saturday, September 29. The next special rail tour which will be open to non-members (subject to accommodation being available) will be run on Sunday, September 30, leaving Liverpool Street at about 9.30 a.m. Details of itinerary and fare will be available in due course.

Other forthcoming activities include the following: visit to Beckton By-Products Works and Gasworks Locomotives, London (June 2); 5 in. gauge railway at Burghclere, Hants, on the same day; a week's tour of mineral and other lines in Cornwall (including depots, works, harbours, etc.) from June 16 to 23; Messrs. MacAlpine's Yard, Hayes (June 30); and a tour of the Isle of Man Railways and Tramways (June 7 to 11). On Sunday, July 22, there will be a special fast run over the Romney, Hythe and Dymchurch Railway, in conjunction with visits to Ashford Works. Full details of membership and of the forthcoming events programme are available from the Hon. Secretary, Mr. H. Davies, "Lynmouth," Sycamore Road, Farnborough, Hants.

THE RAILWAY DEVELOPMENT ASSOCIATION

R.D.A. members and, if space allows, other persons are being invited to take part in a special train trip to be organised by another Association over the Welshpool and Llanfair narrow gauge line on Saturday, June 9, 1956. The visit will involve a departure from Birmingham (Snow Hill) at about 12.30 p.m. and arrival back there on return at about 9 p.m. The cost will be approximately £1. All participants will have to pay this as no differential rate would be possible for shorter journeys. Anyone desiring full details of arrangements should send a foolscap-sized stamped addressed envelope to Mr. O. H. Prosser, 38 Lyndon Road, Sutton Coldfield, Warwickshire, requesting particulars *immediately on reading this announcement*. In so doing they should, however, bear in mind that (*a*) earlier closure of the Welshpool & Llanfair than now contemplated may mean cancellation at a late juncture and (*b*) the earliest possible approach for details is advisable, as applications may well exceed seats available.

THE ELECTRIC RAILWAY SOCIETY

IN his talk, "Impressions of Some American Electric Railways," on March 7, Mr. J. G. Bruce, B.Sc., M.I.E.E., recalled his impressions of several electric railways, both below and above the ground, gained during his recent 6-months stay in New York, Philadelphia and Boston. As well as supporting his remarks with illustrations, he made some interesting comparisons between British and American practices. The Society caters for those specially interested in electric railways and also publishes a bi-monthly journal. Those interested are invited to obtain further details of the Society from E.R.S., 4, Sandhurst Road, Sidcup, Kent.

THE RAILWAY CLUB

AT their meeting on April 6 members heard a talk on the Meon Valley Railway by Mr. D. Cullum. The speaker had devoted a great deal of time to the study of the working of the line over its entire history and displayed a unique collection of photographs, plans of the stations and junctions, and other documents. He also sketched the events leading to the construction of the line. It had its origins in 1896 in a proposal by local landowners for the construction of a direct line to Portsmouth from the Great Western Railway near Basingstoke. This was defeated but a line following closely on the course of that previously proposed was built by the L.S.W.R. under a Light Railway Order of 1897 from Basingstoke to Butts Bridge on the Alton-Winchester line. The Meon Valley line itself was 22¼ miles long from Butts Bridge to Knowle, two miles north of Fareham on the line from Eastleigh to Portsmouth. In association with the Meon Valley line, the existing track from Alton to Butts Bridge was doubled. At the next meeting on June 1 at 7 p.m. Mr. C. F. Wills will read a paper on the Isle of Wight railways, while on June 9 the Club is visiting the ex-G.E. Bentley and Hadleigh branch in a special train of goods brakevans from Ipswich.

THE LOCOMOTIVE CLUB OF GREAT BRITAIN

A COACH tour of Central Wales has been arranged for Saturday and Sunday, June 23 and 24, visiting Oswestry, Aberystwyth and Machynlleth motive power depots. The itinerary includes a special train trip over the Welshpool and Llanfair branch; this may be the last passenger train over this line as early closure is threatened. There will also be a journey by ordinary passenger train over the Vale of Rheidol, and it is hoped to include in addition special trains over the Festiniog and Talyllyn Railways. There will be some vacancies after members' requirements have been met, and further details may be obtained from Mr. M. Burton, 85 Balmoral Road, Gillingham, Kent, by enclosing a stamped addressed envelope. Arrangements can be made if desired for persons who only wish to travel by one or more of the special trains to do so. Recent speakers at London Branch Evenings have included Mr. A. G. Williamson on "Thirty Years of Brighton Engines," and Mr. T. S. Lascelles on "Railway Accidents and Safety Measures." The programme of visits to motive power depots and works is now in full swing. Details of membership may be obtained from Mr. E. A. Wilkinson, 8 St. John's Court, Isleworth, Middlesex.

SMALL ADS

Announcements made in this column cost only 4d. per word and will be read by upwards of 27,000 people. Insertion, which must be prepaid, to be addressed to "T.I." Small Ads., Craven House, Hampton Court, Surrey.

THE BACK NUMBER SPECIALIST.—Lens of Sutton, 50 Carshalton Road, Sutton, Surrey. "Trains Illustrated," Vol. 3 to date, 1/6 each. "Buses Illustrated," Nos. 11 to date, 2/6 each. "Railway Magazines," before 1942, 2/- each ; 1942 to date, 1/6 each ; "Railways" and "Railway World," 1/- each. "Model Railway News," "Model Railway Constructor," "Model Engineer," "Every Spotter's Weekly," all 6d. each. "Railway Modellers," 1/6 each. Glossy P.C.s of Buses, Trams and Locos 6d. each. Call or Write.

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LOCOSPOTTERS FIXTURES

THE NORTHERN RAILFANS CLUB

This Club's programme for late June and early July includes the following visits : **Sunday, June 10**—Crewe Works and Chester Shed (Mr. Smith) ; **Saturday, June 16**—Darlington Works and Shed (Mr. Brown) ; **Sunday, June 17**—25E, 25F, 20E (Mr. Brown) ; **Saturday, June 23**—Coach tour of Manchester, including Gorton and Horwich Works, 7/6 (Mr. Hawley) ; **Sunday, June 24**—Coach tour of Manchester (Gorton Works 5/3) (Mr. Hawley) ; on both tours all sheds except 9A will be included ; **Saturday, July 7**—11A and 11B (Mr. Brown) ; **Sunday, July 8**—Crewe Works (Mr. Smith). S.A.E. for full details to Divisional Secs., Mr. C. B. Brown, 17 Glen View Street, Cornholme, Todmorden, Lancs, Mr. T. H. Smith, 380 Underwood Lane, Crewe, Cheshire, or to the Club President, Mr. Ray A. Hawley, "Torview," Goostrey, Crewe, Cheshire. Subscription is now 4d. per month (4/- per year) due to increased postage and printing costs.

The Edinburgh Group of the Scottish Locospotters Club hold fortnightly meetings at Dalry House, Orwell Place, Edinburgh. Meetings for this month are on **June 6 and 20** at 6.30 p.m. Full details from the Area Secretary, Mr. C. Minay, 5 Osborne Terrace, Edinburgh 12, enclosing S.A.E.

Gloucestershire L.S.C. will now be resuming activities under Mr. P. J. Sharpe, who has just completed his National Service. Trips will be arranged in conjunction with Mr. J. Thomson of the City Youth Club. All interested L.S.C. members living in the Herefordshire, Gloucestershire and Bristol areas are invited to contact Mr. P. J. Sharpe, The Nook, Huntley, Glos, enclosing S.A.E. They will then receive circulars giving details of all trips arranged by Mr. Sharpe and Mr. Thomson. **Sunday, June 10**—Visit to Birmingham and Wolverhampton. Full details from Mr. Sharpe.

Hampshire Locospotters Club are planning a good programme of visits for the summer. This club covers an area approximately South of the Southern Region West of England main line from Basingstoke to Salisbury to the coast from Portsmouth to Poole. All enquiries enclosing S.A.E. to Mr. G. E. Jackson, 32 Heysham Road, Shirley, Southampton.

A.M.R. East Midlands Locospotters Club. The following fixture has been arranged : **Sunday, June 10**—Lincoln, Frodingham, Doncaster, Mexborough, East Retford and Doncaster. Write for further details with a stamped addressed envelope to the Club Organiser. Good programme is being planned for 1956 for all. Details will be given in our club's news-sheet—A Happy Locospotter—3d. post free. Club Organiser, 82 Arkwright Street, Nottingham.

The South Birmingham L.S.C. are holding fortnightly meetings at Cotteridge School, Pershore Road (near the Savoy Cinema), Cotteridge, near Kings Norton, Birmingham, starting at 7.20 p.m., on **June 14 and 28.** Bus services to Cotteridge are : Outer Circle No. 11, 18A, 45A, B & C, from Navigation Street, also Midland Red Services 145, 146, 147. Refreshments are available at each meeting. A Photographic and Model Railway Section are being formed also, examinations for the Fourth Link Certificate in Progressive Locospotting are now being held.

All spotters in the area are advised to get in touch with Mr. Murray at the meetings, or write to Mr. Murray at the address below—no callers. Good programme of visits arranged. Please note the following fixture in **October :** Special trip by W.R. diesel railcar to Swindon out via Bristol return via Oxford calling at sheds en route. Limited accommodation. early application essential. Fare 34/-, no halves. A deposit of 10/- will secure a seat. Deposit and S.A.E to Mr. R. W. Murray, 142 Church Road, Northfield, Birmingham 31.

Bournemouth Locomotive Society (affiliated to the I.A.L.S.C.) have arranged the following trips : **Saturday, June 2**—Dover, Ashford, Tonbridge. **Sunday, June 24**—Swindon sheds and works. Coach fare 15/-. 4/- deposit with application. Details from Mr. D. V. Stanley, "Forest View", 12 Spurgeon Road, Southbourne, Bournemouth, enclosing S.A.E.

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